## A. Z. TSISYK

## THE LATIN LANGUAGE



Minsk BSMU 2015

# МИНИСТЕРСТВО ЗДРАВООХРАНЕНИЯ РЕСПУБЛИКИ БЕЛАРУСЬ 

 БЕЛОРУССКИЙ ГОСУДАРСТВЕННЫЙ МЕДИЦИНСКИЙ УНИВЕРСИТЕТ КАФЕДРА ЛАТИНСКОГО ЯЗЫКАА. 3. Цисык

# ЛАТИНСКИЙ ЯЗЫК THE LATIN LANGUAGE 

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## PREFACE

This manual is meant for English-speaking students of medical universities of the Republic of Belarus. Its structure corresponds to the syllabus presented in the State Educational Standard Plan for the subject "The Latin Language" taught in the medical universities. The manual has been composed in accordance with generally accepted patterns expressed in well-known manuals and textbooks of Latin and Fundamentals of Medical Terminology.

The manual is divided into four parts - phonetics, the anatomical part with the main grammar rules, the pharmaceutical part and the clinical one.

Every real lesson, as it is generally known, has a uniform structure: checking the home task (orally and in writing), some explanation of a new topic, students' work with exercises. The manual contains all necessary components for this work - grammar and terminological material, as well as exercises. In the latter, words are given in alphabetical order, and every lesson is provided with Latin-English and English-Latin glossaries. Such a distribution of educational material should help students in their work with exercises.

According to high school norms of studying linguistic subjects, students are to learn 30-40 new words at every lesson, although this word memorizing can be managed naturally only due to a strainuous efforts to do the homework. But then, this work is constantly facilitated by lexical affinity of equivalent words in Latin and English.

The main attention is paid to the anatomical and clinical terms, as namely these terms are and will be mainly needed of all wanted in daily medical practice of foreign students. That is why the pharmaceutical part of the manual is presented quite concisely. As to clinical terms, on the basis of well-known English medical dictionaries we sought to give the scientific definition of each terminological unit. Such an introduction into professional terminology juging by the students' reaction has always been of great interest to them.

The subject "Medical Latin" is mastered and controlled chiefly in written form. So both proper spelling and grammar arrangement are of great value as spoken Latin is very simple. That's why control tests at every lesson as well as summing up are performed only in written form.

The students should bear in mind, that only systematic work on the topic and vocabulary of every lesson on their own can result in success.

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## INTRODUCTION TO THE SUBJECT

The subject you are going to study is the Latin Language. To some point, this name is relative, because nowadays there are no people speaking Latin. From the school course of world history you can remember, that many centuries ago, where nowadays Italy is, there was the Roman Empire. The Roman state which included many lands and people existed till 464 A.D. And initially, Rome was a small town, founded by an Italian tribe in 753 B.C. and Latin was its native language. Gradually, century after century, Rome became the most powerful state of the Mediterranean and Latin was widespread and acknowledged.

An event of tremendous historical importance for both Rome and the future of European culture was the Roman conquest of Greece, the motherland of European culture and science. The Greek physician Hippocrates is namely considered to be the founder of European scientific medicine. Hippocrates and other Greek physicians made a great contribution into the development of medicine, that's why Greek medicine was extremely popular and prestigious among the population of the Mediterranean area. For this reason, Greek medical terms were borrowed into Latin and came into use in different countries. So originally the European medical terminology was formed on the basis of Greek and Latin words.

In the new history of Europe, beginning with the Roman state's collapse, the Latin language was used for 1000 years as the language of state establishments, Catholic religion, education and science, especially at universities founded in the 12th century. Every university would have a medical faculty. Diplomas and theses as well as the process of education itself were in Latin. As to medicine, Latin became the international professional language of physicians. Medical terms rooting from Latin and Greek are presented in any European language as borrowings. What's more, there exist lists of biological and medical terms, forming the so-called Nomenclatures, approved at the International Congresses of scientists - anatomical, histological, microbiological etc. Latin terms of those nomenclatures are used in education and scientific literature. That's why future doctors must study fundamentals of international medical terminology, based on Latin grammar and Latin and Greek word building elements (roots, stems and affixes).

Among modern european languages English, and, particularly, medical English, contains a great number of Latin and latinized Greek words. It becomes evident when comparing medical glossaries of Latin and English. To prove this compare some medical terms in Latin and English.

| Latin anatomical terms | English equivalents |
| :---: | :---: |
| abdomen | abdomen |
| alaris | alar |
| canalis | canal |
| cardiacus | cardiac |
| cavitas | cavity |
| lobus | lobe |
| longus | long |
| tonsilla | tonsil |
| vomer | vomer |


| Latin pharmaceutical terms | English equivalents |
| :---: | :---: |
| acidum | acid |
| Acidum aceticum | acetic acid |
| aether | ether |
| cortex | cortex |
| dilutus | diluted |
| herba | herb |
| Mentha | mint |
| pilula | pill |
| tinctura | tincture |


| Latin clinical terms | English equivalents | Meaning |
| :---: | :---: | :---: |
| adenitis | adenitis | inflammation of gland |
| bradyphagia | bradyphagia | slowing of swallowing |
| cancerophobia | cancerophobia | fear of cancer |
| cholecystogramma | cholecystogram | results of gallbladder X-ray examination |
| haematuria | hematuria | blood in the urine |
| lipuria | lipuria | lipid exretion by urine |
| otogenus | otogenic | developing from the ear |
| tachycardia | tachycardia | abnormally fast heart rate |
| trichalgia | trichalgia | feeling of pain in the hair |

As we see, in clinical terminology using Latin terms is particularly preferable, because one Latin word can change the whole group of English words, expressing some pathological phenomenon.

The proximity of medical terms in Latin and English can be explained very simply: it is well known, that English medical terminology developed from Medieval Latin terminology, which had absorbed ancient Latin and Greek medical lexical units. Both Latin and ancient Greek are an inexhaustible source for a new term building, and this process keeps on going. Everybody striving to become a doctor must master Latin and fundamentals of international medical Terminology.

The course of Latin at the Medical University you are going to study consists of 3 main parts, which correspond to the main groups of medical
terminology: anatomical (and partly histological), pharmaceutical and clinical ones. This material is divided into 2 academic terms (semesters); each lesson is once a week. The first term is devoted to learning phonetic and main grammar rules of Latin anatomical terminology. During the second term the students get acquainted with the fundamentals of pharmaceutical and clinical terminology. Each new lesson includes your teacher's explanation of the topic of the lesson, but the main bulk of work for you is your home task. A specific feature of studying during both terms is written control of checking home task preparation at every lesson. Besides this regular test control, 3 written tests (for 45 and 90 minutes) are provided. The purpose of the first one is to control the knowledge of about $50 \%$ of the course material, and that of the second one - mastering the entire material of each part of the course. There exist uniform (for all groups and teachers) rules of the control assessment and you will be acquainted with them. So, at every lesson, you will first work orally, checking the home task with your teacher, and then your knowledge will be controlled in written form (while books and notebooks are closed). The principal way to this knowledge is your own persistent work with your textbook memorizing Latin words and rules of its grammar. And, without doubt, every student can succeed in learning Latin and fundamentals of medical terminology, if his or her efforts are steady and diligent.

## Part I <br> PHONETIC RULES OF PRONUNCIATION

## Lesson 1 <br> THE LATIN ALPHABET. THE PRONUNCIATION OF VOWELS, CONSONANTS AND LETTER COMBINATIONS

§ 1. Latin alphabet

The Latin alphabet includes 25 letters.

| Letters | Names | $\begin{gathered} \text { Latin } \\ \text { Pronunciation } \end{gathered}$ | Latin examples and their transcription | English equivalents |
| :---: | :---: | :---: | :---: | :---: |
| A a | a [ $\Lambda$ ] | [a] | vas [v/s] | vessel |
| B b | be [be] | [b] | bulbus [bú:lbus] | bulb |
| C c | tse [tse] | $\begin{gathered} {[\mathrm{ts}]} \\ {[\mathrm{k}]} \\ \hline \end{gathered}$ | coccyx [kó:ktsiks] | coccyx, coccygeal bone |
| D d | de [de] | [d] | dens [dens] | tooth |
| E e | e [e] | [e] | vertebra [vé:rtebr $\Lambda$ ] | vertebra |
| Ff | ef [ef] | [f] | frontalis [frontā:lis] | frontal |
| Gg | ge [ge] | [g] | genu [gé:nu] | knee |
| Hh | ha [h/] | [h like English heart, here | hepar [hé:p $\Lambda$ r] | liver |
| I i | i [ i] | [i] | incisura [incizú:r $\Lambda$ ] | incisure |
| j j | yot [yot] | [j] like English yes, you | jugularis [yuguláris] | jugular |
| K k | ka [k^] | [k] | skeleton [ské:leton] | skeleton |
| L1 | el [el] | 1 [as in English life, love] | cellula [tsé:llul $\Lambda$ ] | cell |
| M m | em [em] | [m] | mors [mors] | death |
| N n | en [en] | [n] | nodus [nó:dus] | node |
| O o | o [o] | [o] | coronarius [coronárius] | coronary |
| Pp | pe [pe] | [p] | palpebra [pálpebr $\Lambda$ ] | eyelid |
| Q q | ku [ku] | [kv] together with vowel $\mathbf{u}$ and vowel a, e, i, o, u after u | Quercus [kvé:rkus] quartus [kvá:rtus] | oak fourth |
| R r | er [er] | [r] | renalis [rená:lis] | renal |
| S s | es [es] | $\begin{aligned} & {[\mathrm{s}]} \\ & {[\mathrm{z}]} \\ & \hline \end{aligned}$ | sinus [sí:nus] incisura [intsizú:r $\Lambda$ ] | sinus, hollow incisure |
| T t | te [te] | $\begin{gathered} \hline[\mathrm{t}] \\ {[\mathrm{ts}]} \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { tibia [tí:bi } \Lambda \text { ] } \\ \text { articulatio [artikulá:tsio] } \end{gathered}$ | tibia, shine-bone articulation, joint |
| U u | u [u] | , | succus [sú:kkus] | juice |
| V v | ve [ve] | v | valva [vá:lv $\Lambda$ ] | valve |
| X x | iks [iks] | ks | dexter [dé:kster] | right, right-hand |
| Y y | ipsilon <br> [ípsilon] | 1 | gyrus [gí:rus] | gyrus, convolution |
| Z z | $\begin{gathered} \text { zeta } \\ \text { [zét } \Lambda] \end{gathered}$ | z | zygomaticus <br> [zigomátikus] | zygomatic |

The last two letters, borrowed by Romans from Greek alphabet, are used, as a rule, in the words of Greek origin.

## § 2. Division of Latin sounds

Six letters of the alphabet (a, e, i, o, u, y) correspond to vowels and nineteen ( $\mathrm{b}, \mathrm{c}, \mathrm{d}, \mathrm{f}, \mathrm{g}, \mathrm{h}, \mathrm{j}, \mathrm{k}, \mathrm{l}, \mathrm{m}, \mathrm{n}, \mathrm{p}, \mathrm{q}, \mathrm{r}, \mathrm{s}, \mathrm{t}, \mathrm{v}, \mathrm{x}, \mathrm{z}$ ) denote consonants.

## § 3. Pronunciation of vowels

Vowels in Latin, except " y ", sound practically the same, as the sounds of their names in the alphabet (see above). So, the letter "a" sounds [a], the letter $\mathbf{e}$ - sounds [e] and so on. One may add, that the stressed vowel corresponds in pronuntiation to a long one in English, compare:
cavitas [cá:vit $\Lambda \mathrm{s}$ ] - cavity
apertura [ $\Lambda$ pertú:r $\Lambda$ ] — aperture, opening
venosus [venó:zus] - venous
tonsilla [tonsi:11 1 ] tonsil
The letter " $y$ " (ípsilon) sounds as the Latin letter "i" (that's why the Frenchmen call y "igrek", i. e. "the Greek "i"):
tympanum [tí:mpanum] - drum
All the above given examples also indicate, that Latin vowels don't practically change their sound quality in different syllables. But the vowel "i" placed before the vowels "a", "e", "o", "u" when making a common syllable with them, changes its sound characteristics: now it sounds similar to the English vowel " y " in the yard, yours, yourself, youthful, let's compare:
maialis [ $\mathrm{m} \Lambda \mathrm{ja}: 1 \mathrm{lis}$ ] - referring to May
ieiunum [jejú:num] - jejunum
major [má:jor] - greater
As in such cases the letter " $\mathbf{i}$ " sounds different compared to the vowel " $\mathbf{i}$ ", the scientists in the XVI century decided to introduce a new letter $\mathbf{j}$ into the Latin alphabet, so as to substitute the vowel "i": majalis, jejunum, major and so on. It is common to use the letter " j " in medical and biological terms. Let's, however, note that in the terms of the Greek origin the vowel " $\mathbf{i}$ " never makes a syllable with the subsequent vowels "a", "e", " $\mathbf{o}$ ", "u" and therefore the letter $\mathbf{j}$ cannot be used:
iater [iá:ter] physician, commonly geriater, paediater, psychiater, phthisiater and so on - these terms will be discussed in the clinical part of our course. We can also mention the noun Iodum [ió:dum] - iodine (Latin names of chemical elements are to be written with capital letters).

## § 4. Pronunciation of two vowel combination

Two vowels following each other can form the so-called diphthong that is pronounced as a combination of two vowels pronounced in one syllable.

So au [au] is pronounced as in the English words down, sound, south, compound and so on:
auris [áuris] - ear, caudalis [kaudá:lis] - caudal, trauma [tráuma] injury, wound.

Eu [eu] has no analogue in English, so its pronunciation must be learnt by the spelling memorizing. However, you should pay attention to the letter combination "eu" at the end of words, where it doesn't make a diphthong and each vowel is pronounced separately:
sigmoideus [sigmoí:deus] — sigmoid
corpus luteum [kó:rpus lú:teum] - corpus luteum (yellow body)
Two vowels can also form a digraph, which sounds like the Latin vowel "e":
ae - [e] — costae [kó:ste] — ribs
oe - [e] — oedema [edé:m m$]$ — swelling
If each vowel in such digraphs is to be pronounced separately, two dots are placed over the letter $\mathbf{e}$ :
aër [á:er] - air, Aloë (names of medical plants are to be written in Latin with the capital letter) [á:loe] - aloe.

## § 5. PRONUNCIATION OF CONSONANTS

Consonants $\mathbf{b}, \mathbf{d}, \mathbf{f}, \mathbf{h} \mathbf{k}, \mathbf{m}, \mathbf{n}, \mathbf{p}, \mathbf{q}, \mathbf{s}, \mathbf{t}, \mathbf{v}, \mathbf{x}$ are similar in pronouncing to English. The difference is that consonants $\mathbf{p}, \mathbf{t}, \mathbf{k}$ are not aspirated, as in English. Pronunciation of the rest consonants is to be explained.

The letter Ce before the vowels "e", " $\mathbf{i} ", " \mathbf{y}$ " and digraphs ae, oe is pronounced as [ts], but before the vowels "a", "o", "u" and consonants (except $\mathbf{h}$ ) is pronounced as [k]:
cervicalis [tserviká:lis] - cervical
caecum [tsé:kum] - caecum
coccyx [kó:ktsiks] - coccyx, cockerel bone
The letter $\mathbf{G g}$ is always pronounced like [g] in English get, glass, disguise:
gaster [gá:ster] — stomach
genu [gé:nu] - knee
vagina $[\mathrm{v} \Lambda$ gí:n $\Lambda]$ - vagina
The letter Hh is pronounced approximately as h in English:
homo [hó:mo] - man
hyoideus [hioí:deus] - sublingual
The letter Ll is pronounced in someway softer than in English and is palatalized both before vowels and consonants (as in the pronunciation of such English words as look and live):
albus [á:lbus] — white
cellula [tsé:llul $\Lambda$ ] - cell
palatinus [p $\Lambda 1 \Lambda$ tínus] - palatine
pyloricus [piló:rikus] - pyloric

The letter $\mathbf{R r}$ in Latin is pronounced always clearly and distinctly not as the English Rr [a:]
dexter [dé:xter] — right
posterior [posté:rior] — back
renalis [rená:lis] - renal
The letter $\mathbf{S s}$ between two vowels is pronounced like [z], in other cases as [s]:
basis [bá:zis] — base
sinus [sí:nus] - sinus, hollow
The letter $\mathbf{T t}$ is commonly pronounced as [ t$]$ without aspiration: tinctura [tinktú: $\mathrm{r} /$ ] — tincture. But in such a letter combination, where $\mathbf{i}$ follows $\mathbf{t}$ plus some other vowel, $\mathbf{t}$ is pronounced as [ts]:
articulatio [artikulá:tsio] - joint
protuberantia [protuberá: ntsia] - protuberance
There is, however, an exception from this last rule: if before the combination $\mathrm{ti}+$ vowel the consonants " s " or " x " are placed, then the pronunciation of $\mathbf{t i}$ is [ti]:
digestio [digé:stio] - digestion
ostium [ó:stium] - orifice.
The letter $\mathbf{Z z}$ is pronounced as [z]:
zona [zó:n $\Lambda$ ] - zone
horizontalis [horizontá:lis] — horizontal
But in two cases we pronounce this letter as [ts]: influenza [influé:nts $\Lambda$ ] grippus, influenza and Zincum [tsí:nkum] - zink.

## § 6. PRONUNCIATION OF CONSONANT COMBINATIONS

Two consonants can form a digraph, which is pronounced as a consonant:
ch is pronounced as [kh]:
chorda [khó:rd $\Lambda$ ] — cord
charta [khá:rt $\Lambda$ ] — paper
ph is pronounced as [f]:
lymphaticus [limfá:ticus] - lymphatic
pharynx [fa:rinks] - pharynx
rh is pronounced as [r]:
rhinorrhagia [rinoragi:a] — rhinorrhagia (nasal bleeding)
rhomboideus [romboí:deus] — rhomboid
th is pronounced as [ t ]:
thorax [tó:raks] - chest
labyrinthus [1 1 birí:ntus] — labyrinth
The combination of three consonants sch is pronounced as [skh]:
schema [skhé:m $\Lambda$ ] - scheme
ischiadicus [iskhiá:dikus] — sciatic

## § 7. Pronunciation of some letter combinations

The letter combination ngu is pronounced as [ngv], if the vowel $\mathbf{u}$ is followed by one of the vowels $\mathrm{a}, \mathrm{e}, \mathrm{i}, \mathrm{u}$ :
lingua [lí:ngv $\Lambda$ ] - tongue, language
unguentum [ungvé:ntum] - ointment
unguis [ú:ngvis] - nail
But if a consonant follows " $\mathbf{u}$ ", then ngu is pronounced as [ngu]:
angulus [á:ngulus] - angle
lingula [li:ngul $\Lambda$ ] - lingula, little tongue
The letter combination qu with the following vowel $(\mathbf{a}, \mathbf{e}, \mathbf{i}, \mathbf{0}, \mathbf{u})$ is pronounced as [kv] with a subsequent vowel:
squamosus [skvamó:zus] - squamosal
aqueductus [akvedú:tus] - aqueduct
Quercus [kvé:rkus] — oak

## § 8. Exercises

1. Read the following words paying special attention to the vowel pronunciation:
forámen (opening), ligaméntum (ligament), dúctus (duct), interglobuláris (interglobular), longitudinális (longitudinal), massetéricus (masticatory, chewing), pylóricus (pyloric), synoviális (synovial), tympánicus (tympanic), siníster (left), zygomáticus (zygomatic)
2. Read the following words paying special attention to the pronunciation of the letter $\boldsymbol{c}$ :
cáput (head), cervicális (cervical), cérebrum (brain), cútis (skin), Ácidum acéticum (acetic acid), síccus (dry), fácies (face, surface), coccygéus (coccygeal), coerúleus (blue), caécum (caecum), búccae (cheeks), carcinóma (cancer), sáccus lacrimális (lacrimal sac)
3. Read the following words paying special attention to the pronunciation of the letters $\boldsymbol{g}$ and $\boldsymbol{q}$ :
nérvus hypoglóssus (hypoglossal nerve), gánglion pterygopalatínum (pterygopalatine ganglion), rámi gingiváles (gingival branches), gánglion geniculátum (geniculate ganglion), gýrus anguláris (angular gyrus), húmor aquósus (aqueous humor), aquedúctus vestíbuli (vestibular aqueduct), cósta quínta (fifth rib), márgo squamósus (squamosal border)
4. Read correctly the following words, paying special attention to the consonants j, sand $\boldsymbol{t}$ :
ála májor (major wing), flexúra duodenojejunális (duodenojejunal flexure), júga alveolária (alveolar yokes), articulátio compósita (complex joint), óstium atrioventriculáre déxtrum (right atrioventricular orifice), incisúra juguláris (jugular notch), segméntum basále antérius (anterior basal segment), básis óssis sácri (base of sacrum), míxtio pro potióne (mixture for drinking).
5. Read correctly the following words paying attention to combinations of vowels:
cóstae spúriae (false ribs), forámen caécum línguae (caecum foramen of tongue), Óleum Eucalýpti (eucalyptus oil), oedéma larýngis (edema of larynx), nérvus auriculáris (auricular nerve), aponeurósis línguae (lingual aponeurosis), céllulae haematopoëticae (hematogenic cells), glándulae oesophagéae (oesophageal glands), pneumonía mígrans (migratory pneumonia).
6. Read attentively the following words with vowel and consonant combinations:
nérvus ischiádicus (sciatic nerve), Strophanthínum (strophanthin), Synthomycínum (synthomycin), fébris haemorrhágica (hemorrhagic fever), ráphe pharýngis (pharyngeal raphe), ásthma bronchiále (bronchial asthma), vértebrae thorácicae (thoracic vertebrae), unguéntum ophthálmicum (ophthalmic ointment), labyrínthus ethmoidális (ethmoidal labyrinth), Methylénum coerúleum (blue methylen), rhizóma Glycyrrhízae (rhizome of licorice), Schizándra chinénsis (chinense magnolia vine), sectiónes hypothálami (sections of hypothalamus), dúctus cholédochus (common bile duct), trúncus brachiocephálicus (brachiocephalis trunk), distántia trochantérica (trochanteric distance), hemisphérium cerebélli (hemisphere of cerebellum), tubérculum pharyngéum (pharyngeal tubercle), véna saphéna (saphenous vein), cirrhósis hépatis (biliary cirrhosis), typhus abdominális (abdominal typhus), nephrolithíasis chrónica (chronic nephrolithiasis), foétor ex óre seu halitósis (fetid or offensive breath or halitosis)

## Lesson 2 ACCENT RULES

## § 9. Accent in the words consisting of two syllables

If a word consists of two syllable, there is always only one stress: the first syllable is stressed: cós-ta, lá-rynx, nér-vus

## § 10. ACCENT IN POLYSYLLABIC WORDS. LENGTH AND BREVITY OF THE SECOND END SYLLABLE

In polysyllabic words consisting of three and more syllables, the second or third syllables from the end of the word can be stressed. The stress depends on the length or brevity of the second word end syllable: if it is long, it is stressed, if it is short, it cannot be stressed and then the third word end syllable is stressed.

The length and brevity of the second syllable and particularly in textbooks are usually marked by special signs: a short line is placed over the vowel if it is long, and a little arch - if it is short, compare:

$$
\overline{\mathrm{a}}-\check{\mathrm{a}}, \overline{\mathrm{e}}-\check{\mathrm{e}}, \overline{\mathrm{i}}-\check{\mathrm{i}}, \overline{\mathrm{o}}-\check{\mathrm{o}}, \overline{\mathrm{u}}-\breve{\mathrm{u}}, \mathrm{y}-\check{\mathrm{y}} .
$$

So, if we find such words as forāmen, incisūra, hepatītis etc. in the dictionary, we can instantly determine, that such words have an accent on the second syllable from the end.

If in the dictionary we see such words as lamǐna, encephălon, thoracǐcus etc., we understand that the third syllable from the end must be stressed: lámina, encéphalon, thorácicus.

Now, we should ask a crucial question: do we have to consult the dictionary about the quality of the second end syllable in every case or not? Fortunately, there exist some rules helping us to determine at once the length or brevity of the second end syllable, or more simply, of the second end vowel. First of all, there are suffixes containing vowels which are long or short by nature. Such suffixes called accordingly "long" or "short" can give us guidance about the length or brevity of the second end vowel.

## § 11. Long Suffixes

Before listing the suffixes, one must notice that part of these suffixes is always long or short in all kinds of terminology - anatomical, pharmaceutical, clinical. As we are going to begin with anatomical terminology and continue studying it during the first semester, it would be proper to begin with the suffixes in anatomical terms.

| Suffixes | Examples | English equivalents | Exceptions and their translation |
| :---: | :---: | :---: | :---: |
| -āl- | dentālis horizontālis | dental horizontal | encephălon (brain) |
| -ār- | articulāris mandibulāris | auricular mandibular |  |
| -āt- | caudātus meātus | caudate <br> passage | prostăta (prostate) |
| -īn- | palatīnus vagīna | palatine vagina, sheath | lamĭna (lamine), femǐna (women), retĭna (retina), dens serotĭnus (wisdom tooth), nervus trigemĭnus (trigeminal nerve), termĭnus (term) |
| -īv- | $\begin{gathered} \text { gingīva } \\ \text { dens incisīvus } \end{gathered}$ | gingiva, gum incisor tooth |  |
| -ōs- | aponeurōsis petrōsus | aponeurosis stony |  |
| -ūr- | incisūra sutūra | incisure, slit or notch suture, line of junction |  |

## § 12. SHORT SUFFIXES

| Suffixes | Examples | English equivalents | Exceptions |
| :---: | :---: | :---: | :---: |
| -iăc- | cardiăcus <br> coeliăcus | cardiac <br> coeliac |  |
| -ǐc- | gastrǐcus <br> tunǐca | gastric <br> tunic, coat | vesīca (bladder) |


| Suffixes | Examples | English equivalents | Exceptions |
| :---: | :---: | :---: | :---: |
| - ŏl- | alveǒlus <br> foveǒla | alveolus, sachet (tooth) <br> foveola |  |
| - ǔl- | clavicǔla <br> mandibǔla | clavicle <br> mandible |  |

## § 13. SUFFIXES WITH SIMILAR QUALITY OF VOWEL IN ALL PARTS OF MEDICAL TERMINOLOGY

As mentioned above, some suffixes can always be long or short in all parts of medical terminology, compare:

| Suffix | Anatomical terms | Pharmaceutical terms | Clinical terms |
| :---: | :---: | :---: | :---: |
| -āt- | muscŭlus levātor <br> (levator muscle) | Aqua destillāta <br> (distilled water) | Caries exacerbāta <br> (caries exacerbated) |
| $-\overline{\text { ōs- }}$ | aponeurōsis <br> (aponeurosis) | spirituōsus (spirituous) | erythrocytōsis (erythrocytosis, <br> increased account of red blood <br> cells in the blood) |
| - ūr- | junctūra <br> (juncture, junction) | tinctūra (tincture) | fractūra (fracture) |
| -ǔl- | angǔlus (angle) | Betǔla (birch) | furuncǔlus (furuncle, boil) |

## § 14. THE WAY OF ACCENT DETERMINATION WHEN THE SECOND END VOWEL IS NOT A PART OF A LONG OR A SHORT SUFFIX

In many words the second vowel from the word end is placed before a consonant, but this vowel is not a part of a common long or short suffix. In such cases we can determine its length or brevity controlling those peculiarities of the given word in the textbook vocabulary, compare:
forāmen (opening), orbǐta (eye socket), skelěton (skeleton), suprēmus (highest), tuberosǐtas (tuberosity), urēter (ureter) and so on.

## § 15. SOME RULES OF SYLLABLE LENGTH DETERMINATION

In some cases we can determine the syllable length or brevity with the help of certain rules.

1. The syllable is long, when its vowel is placed before two or more consonants:
ligamentum (ligament)
maxilla (maxilla, upper jaw)
sinister (left)
But, when the vowel is short by nature (it is shown in the dictionary) and it is placed before two consonants, first of which being $\mathbf{b}, \mathbf{c}, \mathbf{d}, \mathbf{g}, \mathbf{p}, \mathbf{t}$ and the second is $\mathbf{l}$ or $\mathbf{r}$, this short vowel is pronounced short:
vertěbra (vertebra), cerěbrum (cerebrum), os triquětrum (triquetrum bone), multĭplex (multiple). And when this vowel is long by nature, our rule is valid:
cicātrix (cicatrix, scar), psychiātri (psychiatrists), salūbris (curative).
2. The syllable is long, when it includes the diphtongs au, eu or ae, oe: amoeba (ameba), diaeta (diet), Althaea (althea).
3. The syllable is long when its vowel is placed before the consonants x or z :
reflēxus (reflex), Oryza (rise).

## § 16. The rules of syllable brevity

1. The syllable is short when its vowel is placed before another vowel:
liněa (line), superǐor (higher, upper)
cornǔa (horns), Aluminǐum (aluminium)
There are, however, two points of exceptions from this rule:
1) in some words of Greek origin the last but one vowel was formed from the diphthong ae, that's why it keeps the length of the syllable:
coccygaeus $\rightarrow$ coccygēus
peritonaeum $\rightarrow$ peritonēum
You have to memorize these exceptions:
perinēum (perineum, fork) peritonēum (peritoneum), trachēa (trachea), anconēus (anconeus muscle), coccygēus (coccygeal), esophagēus (esophageal), glutēus (gluteal), laryngēus (laryngeal), meningēus (meningeal), peronēus (peroneal, fibular), pharyngēus (pharyngeal).

2 ) in clinical terms with the ending -ia their vowel $\mathbf{i}$ and the syllable with it are stressed:
dyskinesía (dyskinesia, disturbance of movement), otoscopía (otoscopy, internal examination of the ear).

Some peculiarities of this exception will be discussed in the clinical part of our course.
2. The syllable is short when its vowel is placed before the digraphs ch, ph , rh, th:
ductus choledǒchus (bile duct)
nephrolìthus (renal calculus)

## § 17. ExERCISES

1. Determine the stress syllable paying attention to the long and short suffixes:
incisūra ethmoidālis (ethmoidal notch), tubercŭlum jugulāre (jugular tubercle), lingŭla sphenoidālis (sphenoidal lingula), semicanālis tubae auditīvae (canal for auditory tube), meātus acustǐcus externus (external acustic meatus), lamĭna perpendiculāris (perpendicular plate), facies palatīna (palatine surface), vesīca biliāris (gallbladder), glandŭlae endocrīnae (endocrine glands), junctūrae cingŭli pelvǐci (joints of pelvic girdle), urethra masculīna (male urethra), spina scapŭlae (spine of scapula), intestīnum tenue (small intestine), alveŏlus dentālis (tooth socket), tunǐca mucōsa linguae (mucous membrane of tongue), arcus
dentālis mandibulāris (mandibular dental arcade), trigōnum submandibulāre (submandibular triangle)
2. Write down and determine the stressed syllable paying attention to the natural length or brevity of the last but one vowel:
tubercǔlum anterius (anterior tubercle), incisūrae costāles (costal slits), vertěbra thoracǐca (thoracic vertebra), ductus choledǒchus (bile duct), forāmen apǐcis radīcis dentis (apical foramen of the root of the tooth), vesīca urinaria (urinary bladder), Oleum Ricȟni (castor oil), Sirūpus Rubi idaei (raspberry syrup), Solutio lōdi spirituōsa (iodine spirituous solution), eczĕma allergǐcum (allergic eczema), stomatītis chronǐca (chronic stomatitis), systēma condūcens cordis (conducting system of heart), apertūra thorācis inferior (lower opening of chest), muscǔlus levātor fornǐcis (muscle raising fornix), Tinctūra Valeriānae (tincture of valerian), facies anterior partis petrōsae (anterior surface of petrous part), canāles palatīni minōres (lesser palatine canals), systēma lymphoideum (lymphoid system)
3. Write down the terms, put the signs of length or brevity over the last but one syllable (using if necessary vocabularies of this manual) and determine in writing the accent:
ligamentum popliteum obliquum (oblique popliteal ligament), cartilago thyreoidea (thyroid cartilage), bifurcatio tracheae (bifurcation of trachea), musculus anconeus (anconeus muscle), atrium meatus medii (atrium of middle meatus), Extractum Crataegi fluidum (liquid extract of hawthorn), paralysis congenita (congenital paralysis), syndromum immunodeficientiae acquisitae (acquired immunodeficiency syndrome), tuberositas pterygoidea (pterygoid tuberosity), anaemia myelogena (myelogenous anemia), arteria circumfexa humeri anterior (anterior circumflex humeral artery), organum vasculosum laminae terminalis (vascular organ of lamina terminalis), fissura longitudinalis cerebri (longitudinal cerebral fissure), fasciculus uncinatus cerebelli (uncinate fasciculus of cerebellum), kyphosis thoracica (thoracic kyphosis), linea glutea inferior (inferior gluteal line), syndesmoses cranii (cranial syndesmoses), articulatio sacrococcygea (sacrococcygeal joint), segmentum anterius mediale (anterior medial segment), infundibulum vesicae felleae (infundibulum of gallbladder), muscli palati mollis et faucium (muscles of soft palate and fauces), papilla duodeni major (major duodenal papilla), ostium atrioventriculare sinistrum (left atrioventricular orifice), membrana bronchopericardiaca (bronchopericardial membrane), arteria pharyngea ascendens (ascending pharyngeal artery), tuberositas deltoidea (deltoid tuberosity)

# Part II ANATOMICAL TERMINOLOGY 

## Lesson 3 <br> THE STRUCTURE OF LATIN ANATOMICAL TERMS. NOUN AND ITS GRAMMAR CATEGORIES

## § 18. THE LATIN TERMINOLOGY IN ANATOMY AND ITS STRUCTURE

Anatomical terminology naming all parts of the human body is the base of medical terminology. For more than a century the so-called Terminologia Anatomica - The International Anatomical Terminology in Latin which is accepted by anatomists of the world has existed. Latin is also the base for creating equivalent terms in other languages. The last edition of this International Anatomic Terminology appeared in 1998 and it contains 7428 terms.

The anatomical term is a word or several words used to denote a definite unit or structure of the human body. So Latin anatomical terms may consist of one, two, three, four and more words - up to 8.

One-word terms consist of one noun in singular or plural:
cor (heart), fauces (fauces)
Two-word terms may consist of:

1. A noun with an adjective in singular or plural:
crista renālis (renal crest); nodi faciāles (facial nodes)
2. Two nouns in singular or plural:
corpus vertĕbrae (body of vertebra); terminatiōnes nervōrum (nerve terminals)

Three-word terms may consist of:

1. Three nouns:
ala cristae galli (wing of cock's crest); laminna arcus vertěbrae (lamina of vertebral arch)
2. One noun plus two adjectives:
glandŭlae salivariae minōres (minor salivary glands); plexus cervicālis posterior (posterior cervical plexus)
3. Two nouns plus one adjective:
arcus anterior atlantis (anterior arch of atlas); tuberositas ossis sacri (sacral tuberosity)

In multiword terms several nouns and adjectives can be presented:
fissūra horizontālis pulmōnis dextri (horizontal fissure of right lung);
proccessus uncinātus vertĕbrae thoracĭcae primae (uncinate process of the first thoracic vertebra)

## § 19. GRAMMAR CATEGORIES OF NOUN

The grammar categories of a Latin noun are the following: 1. Gender. 2. Number. 3. Case. 4. Declension.

There are three genders in Latin: masculine (masculīnum m); feminine (feminīnum $\mathbf{f}$ ); neutral (neutrum $\mathbf{n}$ ).

English nouns, in contrast to Latin ones, have only a natural gender: nouns denoting males are masculine (boy, man), nouns denoting females are feminine (girl, women) and nouns denoting inanimate objects are of neutral gender (bone, vessel).

Latin nouns always have only a grammar gender, which is determined by the ending, but what is more significant, by gender signs too ( $\mathrm{m}, \mathrm{f}, \mathrm{n}$ ). These gender signs are given in the dictionaries, where nouns are presented in the socalled word or dictionary form, which we shall discuss later.

As to the number, both English and Latin have two numbers - singular (singulāris) and plural (plurälis). Just like in English, the number of the noun in Latin shows whether we speak about one thing or more than one. Plural indications in English are very simple (endings -s or -es). In Latin, these indications are more numerous and are determined by the gender and declension. Plural endings will be discussed in detail in a special section.

Case as a grammar category is not presented in every language. It is absent, for example, in French, Italian and Spanish. As to English, we can speak about a "common case" and a "possessive case". In contrast to English, in Latin there are six different forms of noun endings corresponding to each case. Only four case forms of Latin nouns are used in medical terms:

Nominatīvus, Nominative (answers the questions who, what)
Genetīvus, Genitive (answers the questions whose, of what)
Accusatīvus, Accusative (answers the questions whom, what)
Ablatīvus, Ablative (answers the questions by whom, with what).
The first two cases (Nominative and Genitive) are mainly used in the medical terminology, the other cases occur more rarely, they are used in anatomical and pharmaceutical terms in combination with prepositions.

## § 20. DICTIONARY FORM OF NOUNS

It is of vital importance to always remember that each Latin noun must be learnt in its "Dictionary form". This form consists of three components:

1. The full form of the Nominative singular.
2. The Genitive singular ending, indicating the type of declension.
3. Definition of the grammar gender (with the letters $\mathrm{m}, \mathrm{f}, \mathrm{n}$ ):

| Written form | Oral form | English equivalent of the noun |
| :---: | :---: | :---: |
| ala, ae f | ala, alae, feminīnum | wing |
| ligamentum, in | ligamentum, ligamenti, neutrum | ligament |
| nervus, i m | nervus, nervi, masculīnum | nerve |


| Written form | Oral form | English equivalent of the noun |
| :---: | :---: | :---: |
| cancer, cri $m$ | cancer, cancri, masculīnum | cancer |
| Eucalyptus, if | Eucalyptus, Eucalypti, feminīnum | eucalypt |
| cornu, us $n$ | cornu, cornus, neutrum | horn |
| corpus, ŏris $n$ | corpus, corpŏris, neutrum | body |

## § 21. The STEM OF THE NOUN AND THE WAY TO DETERMINE IT

The stem of the noun is essential for declining and word building. It is determined by removing the Genitive ending which indicates the type of the declension:

| Dictionary form | Full form of the Genitive | Stem of noun |
| :---: | :---: | :---: |
| crista, ae f ri | crist-ae | crist- |
| sulcus, i m - furrow, groove, sulcus | sulc-i | sulc- |
| cancer, cri m - cancer | cancr-i | cancr- |
| forāmen, ǐnis n - opening | foramĭn-is | foramĭn- |
| arcus, us m - arch | arc-us | arc- |
| facies, ēi $\mathrm{f}-$ face, surface | faci-ēi | faci- |

## § 22. DESCRIPTION OF DECLENSIONS

Nouns with the ending -ae in the Genitive singular belong to the 1st declension; they are mainly feminine:
ala, ae f - wing
crista, ae f-crest
vertěbra, ae f - vertebra
Nouns having the ending -i in the Genitive singular belong to the 2nd declension.

Nouns of the masculine gender can have the ending -us in the Nominative (the greatest part) or -er (very limited in number):
angŭlus, i m - angle
muscŭlus, i m - muscle
nervus, i m - nerve
cancer, cri m - cancer (the full form of Genitive - cancri)
Nouns of the neutral gender have also two types: nouns with the ending form -um (the main part), and nouns with the ending form -on (they are of Greek origin), compare:
ligamentum, in - ligament
dorsum, in-back
encephălon, i n-brain
colon, i n - colon, large intestine
The 3rd declension is the most numerous one. Here are presented the nouns of all genders and with different endings in the Nominative having the ending, - is in the Genitive. They are commonly divided into two groups.

The first one includes nouns having equal number of syllables in the Nominative and Genitive (so-called parisyllaba):
basis, basis f (basis, is f ) - base
canālis, canālis m (canalis, is m) - canal
The second and the most numerous part of the nouns has one more syllable in the Genitive compared to the Nominative (so-called imparisyllaba):
apex, apǐcis $m$ (the written dictionary form apex, ǐcis m) - apex, tip
tuberosǐtas, tuberositātis f (tuberosǐtas, ātis f) - tuberosity
forāmen, foramǐnis $n$ (forāmen, , ñis $n$ ) - foramen, opening
If such nouns have only one syllable in the Nominative, then the complete form of the Genitive is:
dens, dentis $m$ - tooth
os, ossis n - bone
pars, partis f - part
The 4th declension includes nouns of the masculine and neutral gender having the ending -us in the Genitive:
processus, processus $m$ (processus, us $m$ ) - process
ductus, ductus $m$ (ductus, us $m$ ) - duct
cornu, cornus $n$ (cornu, us $n$ ) - horn
The 5th declension includes nouns having the ending -ei in the Genitive:
facies, faciēi f (facies, ēi f) - face, surface

## Attention! Remember the following:

1. Feminine nouns may occur in the 2 nd and 4 th declensions, masculine ones in the 1 st : oculista, ae m (ophthalmologist), Eucalyptus, i f (eucalypt), manus, us f (hand).
2. Two groups of nouns of the Greek origin retain their particular form:
2.1. Feminine nouns with the ending -e in the Nominative and -es in the Genitive: raphe, es f (a seam on the bony tissue).
2.2. Masculine nouns with the ending -es in the Nominative and -ae in the Genitive: diabētes, ae m (diabetes)

## § 23. Exercises

1. Give in written form the dictionary form of the following nouns:
apex, basis, canālis, cancer, cornu, corpus, cranium, dens, encephălon, facies, ganglion, lingua, mandibǔla, nasus, nervus, orgănon, os, radix, scapǔla, sternum, sulcus, tuber, tubercǔlum, tuberoš̌tas
2. Give in written form the dictionary form of the following nouns and define their stem and declension:
abdomen, angle, arch, base, bone, canal, crest, duct, head, horn, ligament, lower jaw, nose, opening, region, root (radix), skin, skull, surface, tongue, tooth, upper jaw
3. Write down the dictionary form of the nouns, translate the terms from

## Latin:

apex linguae; angǔlus faciēi nasi; basis cranii; canālis radīcis dentis; corpus vertěbrae; facies tubercǔli costae; incisūra mandibǔlae; nervus encephǎli; pars faciēi sterni; septum nasi; sulcus sinus; tuber maxillae
4. Give the dictionary form of each noun, translate the terms into Latin:
abdomen cavity; arch of aorta; base of mandible; body of upper jaw; canal of dental radix (radix of tooth); cancer of the skin; cavity of the nose; cervical part (part of cervix); crest of the rib head; face bone; head of rib; nerve of the brain; nervous node of the neck; part of the process; region of skull; skin nerve; sternal angle (angle of sternum); surface of knee; top of the horn; vertebral arch (arch of vertebra)

## § 24. Vocabulary to Lesson 3

## Latin-English vocabulary 1st declension

costa, ae f - rib
incisūra, ae f-incisure, slit or notch
lingua, ae f - tongue
mandibǔla, ae f-lower jaw, mandible
maxilla, ae f - upper jaw, maxilla
2nd declension
angŭlus, i m - angle
cancer, cri m-cancer
cranium, in - skull
encephălon in - brain
ganglion, in - nervous node
nasus, i m - nose
nervus, i m - nerve
orgănon, i n- organ
septum, i n - septum, dividing wall
sternum, in - sternum, breast- bone
sulcus, i m - sulcus, furrow or groove
tubercŭlum, in - tubercle, small rounded swelling
3rd declension
apex, ǐcis m - apex, top
basis, is f - base
caput, ǐtis n - head
canālis, is m - canal
corpus, ǒris n - body
dens, dentis $m$ - tooth
os, ossis n - bone
radix, īcis $f$ - radix, root
regio, ōnis f - region
tuber, ěris n - tuber, large rounded swelling
tuberositas, ātis f - tuberosity

## 4th declension

cornu, us n - horn, hornshaped process
processus, us m - process
sinus, us $m$ - sinus, hollow curvature or cavity
5th declension
facies, ēi f - face, surface

## English-Latin vocabulary

abdomen — abdōmen, ǐnis n
aorta - aorta, ae f
angle - angŭlus, i m
apex, top - apex, ǐcis m
arch - arcus, us $m$
base - basis, is f
body - corpus, ŏris n
bone - os, ossis n
canal - canālis, is m
cavity — cav̌tas, ātis f
cervical: see neck
costal: see rib
cranial: see skull
crest - crista, ae f
dental: see tooth
duct - ductus, us $m$
ganglion, nervous node - ganglion, in
face - facies, ēi f
head - caput, ǐtis n
horn - cornu, us n
knee - genu, us n
ligament - ligamentum, in
lower jaw, mandible - mandibǔla, ae f
neck - cervix, īcis f
nerve - nervus, i m
nose - nasus, i m
opening - forāmen, ǐnis n
part - pars, partis f
region - regio, ōnis f
rib - costa, ae f
root, radix — radix, $\overline{\mathrm{i}} \mathrm{cis} \mathrm{f}$
skin — cutis, is f
skull - cranium, in
surface - facies, ēi f
tongue - lingua, ae f
tooth - dens, dentis $m$
upper jaw, maxilla - maxilla, ae f
vertebra - vertěbra, ae f
vertebral: see vertebra

## Lesson 4 <br> ADJECTIVES AND THEIR DICTIONARY FORM. ADJECTIVE AND NOUN AGREEMENT

## § 25. INTRODUCTORY INFORMATION ABOUT ADJECTIVES IN LATIN

Both in English and Latin the adjective is a word expressing the quality of a thing: long, short, nasal, simple and so on.

But in contrast to English, Latin adjectives have always grammar agreement with their nouns, that is a noun and an adjective must have the same gender, case and number. The adjective follows the noun.

According to their endings all Latin adjectives are divided into two groups.

## § 26. 1ST GROUP OF ADJECTIVES

Adjectives which have three gender endings make up the 1st group: Masculine forms have the ending -us or -er, Feminine - -a, Neutral - -um:

| Masculine | Feminine | Neutral |
| :---: | :---: | :---: |
| longus (long) | longa | longum |
| liber (free) | liběra | liběrum |
| dexter (right) | dextra | dextrum |

The dictionary form of adjectives includes the full masculine form, endings of the feminine and the neutral ones (when answering, every gender form is pronounced!). All these forms are in the Nominative:
longus, a, um - long oral form: longus, longa, longum
liber, ěra, ěrum - free oral form: liber, liběra, liběrum
dexter, tra, trum - right oral form: dexter, dextra, dextrum
In the last two adjectives the endings of the feminine and the neutral forms are enlarged. It is common for the adjectives with the ending -er in the masculine form because it helps us determine, whether the vowel -e in the feminine and the neutral forms is lost or not.

The gender forms of the adjectives of this group have the declension pattern in the nouns of the 1st and 2nd declensions: feminine forms are declined
like the nouns of the first declension, masculine and neutral forms - like the nouns of the second declension. The stem of these adjectives is determined like that of the nouns:

| Gender form | Nominative | Genitive | Declension | Stem |
| :---: | :---: | :---: | :---: | :---: |
| masculine | longus | longi | second | long- |
| feminine | longa | longae | first | long- |
| neutral | longum | longi | second | long- |
| masculine | liber | liběri | second | liber- |
| feminine | liběra | libĕrae | first | liber- |
| neutral | liběrum | libĕri | second | liber- |
| masculine | dexter | dextri | second | dextr- |
| feminine | dextra | dextrae | first | dextr- |
| neutral | dextrum | dextri | second | dextr- |

As to the adjectives with the masculine form -er, it is more convenient to determine their stem from the feminine Genitive form.

## § 27.2ND GROUP OF ADJECTIVES

This group includes adjectives following the rules of the third declension of nouns. According to their gender endings they are divided into three subgroups. The stem of this group of adjectives is determined like in the preceding group.

The first subgroup is made up of adjectives having three gender endings: -er for masculine, -is for feminine, -e for neutral:

| Masculine form | Feminine form | Neutral form | Genitive form | Stem |
| :---: | :---: | :---: | :---: | :---: |
| acer (sharp, acute) | acris | acre | acris | acr- |
| celer (quick, fast) | celĕris | celĕre | celĕris | celer- |

The written dictionary form, as in the previous group, includes the full masculine form and the endings of the feminine and the neutral:
acer, cris, cre
celer, ěris, ĕre
When answering orally, every gender form is pronounced in full.
The second subgroup includes adjectives with two gender endings. Masculine and feminine forms have the common ending -is, neutral the ending -e:

| Masculine and Feminine form | Neutral form | Genitive form | Stem |
| :---: | :---: | :---: | :---: |
| brevis (brief, short) | breve | brevis | brev- |
| frontālis (frontal) | frontāle | frontālis | frontal- |
| sacrālis (sacral) | sacrāle | sacrālis | sacral- |

Adjectives of this subgroup are the most numerous in every branch of medical terminology.

The dictionary form of these adjectives consists of the full masculine/feminine form and the ending of neutral:
brevis, e; frontalis, e; sacralis, e
The third subgroup is made up of adjectives with one ending, common for the three genders. There are four kinds of such common endings:

1) -ns: sapiens (masculine, feminine, neutral) intelligent
2) -s: teres (masculine, feminine, neutral) round
3) -r: par (masculine, feminine, neutral) equal, pair
4) -x: simplex (masculine, feminine, neutral) simple

Let us look at these adjectives from the point of view of their Genitive form and their stem:

| Gender form | Nominative form | Genitive form | Stem |
| :---: | :---: | :---: | :---: |
| masculine <br> feminine <br> neutral | sapiens <br> sapiens <br> sapiens | sapientis | sapient- |
| masculine <br> feminine <br> neutral | teres <br> teres <br> teres | terĕtis | teret- |
| masculine <br> feminine <br> neutral | par <br> par <br> par | paris | par- |
| masculine <br> feminine <br> neutral | simplex <br> simplex <br> simplex | simplǐcis | simplic- |

The dictionary form of these adjectives includes the Nominative form and the Genitive ending:
sapiens, entis (oral form sapiens, sapientis)
teres, ětis (oral form teres, terĕtis)
par, is (oral form par, paris)
simplex, ǐcis (oral form simplex, simplicis)

## § 28. ADJECTIVE AND NOUN AGREEMENT

To agree an adjective and a noun in Latin means to say or to write these parts of speech in the same gender, number and case. To do it you should:

1) imagine or write dictionary forms of the noun and adjective;
2) correctly determine the gender, number and case of the noun;
3) place the noun in the first place of the term
4) choose the correct grammar form of the adjective for this noun and put it in the second place (after the noun).

Let us take, e. g., the following word combinations: 1) sacral vertebra; 2) carotid tubercle 3) palatine groove

First of all, let us write down the dictionary form of every word:
sacral - sacrālis, e; carotid - carotǐcus, a, um; tubercle - tubercŭlum, i n ; palatine - palatīnus, a, um; groove - sulcus, i m; vertebra - vertĕbra, ae f

Now, let us make up the procedure of agreement:

1) vertěbra: gender - feminine, number - singular, case - Nominative.

So in the dictionary form of the adjective we choose the form sacralis and agree it in this way with the noun vertebra: vertebra sacralis
2) tubercŭlum: gender - neutral, singular, Nominative.

That's why we choose the adjective form caroticum and make up the term tuberculum caroticum.
3) sulcus: Masculine, Singular, Nominative.

So for this noun we need the adjective form palatīnus. Writing down it after the noun sulcus we get as a result the term sulcus palatīnus.

If we have to agree two adjectives with one noun, the order of agreement is the following. The adjective indicating the main space location of the object (cardiăcus, a, um cardiac; cervicālis, e cervical, gastrĭcus, a, um gastric and so on) is placed after the noun: right gastric artery - arteria gastrica dextra, deep lymph vessel - vas lymphatǐcum profundum.

One should be able not only to agree adjectives and nouns in the Nominative, but also make up the Genitive form from this Nominative construction. So, let us make the Genitive forms of the above mentioned Nominative forms:

1) vertĕbra sacrālis: from the dictionary form we already know the Genitive form and write it down: vertebrae. Now, we have to determine the Genitive form of sacralis. As we have seen above, this adjective belongs to the third declension, that's why the Genitive form should have the ending -is, that is sacralis, which finally makes in the Genitive the word combination vertebrae sacralis.
2) tubercŭlum carotǐcum: both the noun and the adjective belong to the second declension, that's why they have to receive the ending -i in the Genitive form - tuberculi carotici.
3) sulcus palatīnus: sulcus, as it is evident from the dictionary form, belongs to the second declension, the ending -us in the adjective palatinus tells us that this form belongs to the second declension and so we can determine the Genitive form as palatīni. The whole term in Genitive form is sulci palatini.

## § 29. Exercises

1. Write down the dictionary form of the following adjectives:
articulāris, celěris, composǐtum, dextrum, frontālis, impar, interna, liběrum, nasāle, palatīna, sapiens, simplex, teres, thoracǐcum
2. Make up the dictionary form of every word, translate the word combinations and add forms of the Genitive singular for every word combination:
articulatio simplex; canālis longus; cornu coccygēum; ductus sublinguālis; facies articulāris; ganglion impar; ligamentum teres; margo sinister; os hyoideum; pars dextra; pulsus cardiăcus celer; sulcus brevis; vas lymphatĭcum profundum; vena occipitālis
3. Agree the following adjectives with the nouns:
angŭlus, i m (frontālis, e; mastoideus, a, um);
articulatio, ōnis f (composǐtus, a, um; sinister, tra, trum; simplex, ǐcis);
facies, ēi f (costālis, e; internus, a, um; dexter, tra, trum)
ganglion, in (impar, ăris; sublinguālis, e);
ligamentum, in (teres, ětis; brevis, e);
margo, 亿̌nis m (dexter, tra, trum; liber, čra, ěrum; nasālis, e);
musculus, i m (teres, ětis; magnus, a, um);
nervus, i m (hypoglossus, a, um; occipitālis, e);
pars, partis f (petrōsus, a, um; frontālis, e);
processus, us $m$ (articularis, e; palatīnus, a, um; brevis, e)
ramus, i m (communǐcans, ntis; costālis, e; externus, a, um);
4. Make up grammatical agreement of the adjectives with the nouns in Latin :
arch (dental, venous, left); artery (deep, lingual, right); bone (short, palatine, hyoid); canal (long, short, sacral); crest (lacrimal, external);duct (hepatic, sublingual); joint (complex, simple); process (palatine, costal); region (cervical, mastoid); tubercle (carotid, lateral); vein (deep, sacral); vertebra (prominent, thoracic); vessel (left, lymphatic)
5. Give the dictionary form of each word and translate the following terms into Latin:
articular surface; costal arch; deep lymphatic vessel; frontal crest; lateral thoracic vein; lateral pterygoid muscle; left hepatic duct; long ligament; medial root; occipital artery; occipital angle; oval opening; palatine process; superficial vein; vertebral column

## §30. Vocabulary to lesson 4

## Latin-English vocabulary

1st declension
arteria, ae f - artery
vena, ae f - vein vertěbra, ae f - vertebra

## 2nd declension

ligamentum, in - ligament
muscǔlus, i m - muscle
3rd declension
articulatio, ōnis f — joint margo, ǐnis m - margin, border
pars, partis f - part
vas, vasis n - vessel

## 4th declension

ductus, us $m$ - duct
pulsus, us $m$ - pulse

## 1st group of adjectives

cardiăcus, a, um - cardiac
coccygēus, a, um - coccygeal
compositus, a, um - complex
dexter, tra, trum - right
externus, a, um - external
iliăcus, a, um - iliac
internus, a, um - internal
hyoideus, a, um - hyoid, sublingual (bone)
hypoglossus, a, um - hypoglossal, sublingual (nerve)
liber, ěra, ěrum - free
longus, a, um - long
lymphatǐcus, a, um - lymphatic
magnus, a, um - large (vein), magnus (adductor), great (nerve)
mastoideus, a, um - mastoid
palatīnus, a, um - palatine
petrōsus, a, um - stony
profundus, a, um - deep
sacer, cra, crum - sacral (bone)
sinister, tra, trum - left
thoracǐcus, a, um - thoracic

## 2nd group of adjectives

articulāris, e - articular
brevis, e - short
celer, ěris, ěre - celer (pulse), swift
communǐcans, ntis - communicative
costālis, e - costal
frontālis, e - frontal
impar, ăris - impar, unpaired
nasālis, e - nasal
occipitālis, e - occipital
sacrālis, e - sacral
sapiens, entis - intelligent, clever
simplex, ĭcis - simple
sublinguālis e-sublingual (excepting nerve and bone)
superficiālis, e - superficial
teres, ĕtis - round (excepting foramen)

## English-Latin glossary

artery - arteria, ae f
carotid - carotǐcus, a, um
cervical - cervicālis, e
column - columna, ae f
complex - composǐtus, a, um
costal - costālis, e
deep - profundus, a, um
dental - dentālis, e
duct - ductus, us $m$
external - externus, a, um
hepatic - hepatǐcus, a, um
hyoid - hyoideus, a, um (os)
joint - articulatio, ōnis f
lacrimal - lacrimālis, e
lateral - laterālis, e
ligament - ligamentum, in
lingual - linguālis, e
left - sinister, tra, trum
long - longus, a, um
lymphatic - lymphatǐcus, a, um
mastoid - mastoideus, a, um
medial - mediālis, e
occipital - occipitālis, e
oval - ovālis, e
palatine - palatīnus, a, um
prominent - promĭnens, entis
pterygoid - pterygoideus, a, um
right - dexter, tra, trum
sacral - sacrālis, e (exept for os)
short - brevis, e
superficial - superficiālis, e
sublingual - sublingualis, e (except for os and nervus)
vein - vena, ae f
venous - venōsus, a, um
vertebral - vertebrālis, e
vessel - vas, vasis n

# Lesson 5 <br> DEGREES OF COMPARISON OF ADJECTIVES. PECULIARITIES OF THE USE OF COMPARATIVE AND SUPERLATIVE DEGREES IN ANATOMICAL TERMS 

## § 31. INTRODUCTORY REMARKS TO THE TOPIC

Comparative and superlative as degrees of comparison exist both in English and Latin, that's why there is no need to explain the essence of these grammar phenomenon. It is more essential to note that in the international medical nomenclatures, the forms of comparative and superlative have a relatively narrow sphere of use. Most frequently they are used in the anatomical terminology. As to the grammar formation, both comparative and superlative are built from the stem of the positive degree, that is from the dictionary form of the adjective.

## § 32. THE COMPARATIVE DEGREE

To form the compative degree, it is necessary 1) to find the stem of the positive degree; 2) to add the suffix -ior for the masculine and feminine forms and -ius for the neutral form:

| Positive degree | Stem | Comparative <br> masculine and <br> feminine form | Comparative <br> neutral form | Translation |
| :---: | :---: | :---: | :---: | :---: |
| longus, a, um (long) <br> ruber, bra, brum (red) <br> simplex, ̌̌cis (simple) | long- <br> rubr- <br> simplic- | longior <br> rubrior <br> simplicior | longius <br> rubrius <br> simplicius | longer <br> redder <br> more simple |

The full dictionary form of the masculine and the feminine has the ending ior while the neutral form has -ius:
longior, ius (written dictionary form) longior, longius (oral form)
rubrior, ius (written dictionary form) rubrior, rubrius (oral form)
simplicior, ius (written dictionary form) simplicior, simplicius (oral form)
Adjectives in the comparative degree have the same pattern of declension as nouns of the third declension. Their distinctive feature is the ending -ōris in the Genitive:

| Nominative form of comparative | Genitive form of comparative | Stem |
| :---: | :---: | :---: |
| longior $(\mathrm{m}, \mathrm{f})$ <br> longius $(\mathrm{n})$ | longiōris | longior- |
| rubrior $(\mathrm{m}, \mathrm{f})$ <br> rubrius $(\mathrm{n})$ | rubriōris | rubrior- |
| simplicior <br> simplicius | simpliciōris | simplicior- |

The grammar agreement of the comparative form with nouns follows the common rules:

|  | Positive degree |  | Comparative degree |
| :--- | :--- | :--- | :--- |
| m | m | m | m |
| processus | longus | processus | longior |
| n | n | n | n |
| ligamentum | longum | ligamentum | longius |
| f | f | f | f |
| costa | longa | costa | longior |
| n | n | n | n |
| systēma | simplex | systēma | simplicius |

## § 33. COMPARATIVE FORMS IN ANATOMICAL TERMINOLOGY

In anatomical (and histological) terminology only limited forms of adjectives in the comparative degree are used. First of all, comparative forms of the adjectives great (large) and little (small) are used:

| Positive degree <br> of Latin adjective | English <br> equivalents | Comparative form <br> of Latin adjectives | English anatomical <br> equivalents |
| :---: | :---: | :---: | :---: |
| magnus, a, um | great, large | maior (major) <br> maius (majus) | greater, larger, major |
| parvus, a, um | little, small | minor, minus | lesser, smaller, minor |

In the forms minor, minus we don't see the full endings -ior, -ius, but that is a distinctive feature of these forms to remember.

In anatomical terminology four adjectives in the comparative form are also used, although from the point of view of English, not every of such forms expresses comparison:

| Latin masculine <br> and feminine form | Latin neural form | Latin dictionary <br> form | English anatomical <br> equivalent |
| :---: | :---: | :---: | :---: |
| anterior | anterius | anterior, ius | anterior |
| posterior | posterius | posterior, ius | posterior |
| superior | superius | superior, ius | upper, superior |
| inferior | inferius | inferior, ius | lower, inferior |

Thus, only 6 adjectives in the comparative degree are used in Latin anatomical terminology:

| Latin dictionary form | Genitive form | Stem |
| :---: | :---: | :---: |
| anterior, ius | anteriōris | anterior- |
| posterior, ius | posteriōris | posterior- |
| superior, ius | superiōris | superior- |
| inferior, ius | inferiōris | inferior- |
| major, ius | majōris | major- |
| minor, us | minōris | minor- |

We should note that the stem of the adjectives in the comparative degree coincides with the Nominative masculine and feminine forms ending with -ior.

The Genitive singular form in the comparative degree is formed by adding the ending -is to the stem.

It is necessary to remember that Latin adjectives in the comparative degree are always placed last in the multiword term:
facies articularis superior - superior articular surface
musculus obliquus capitis inferior - inferior oblique muscle of head

## § 34. The superlative degree

Commonly, the superlative degree is formed by adding the suffix -issimand gender endings -us, -a , -um to the stem of the positive degree:

| Positive degree | Stem | Superlative degree | English equivalent |
| :---: | :---: | :---: | :---: |
| latus, a, um <br> (broad, vast, wide) | lat- | latissǐmus, a, um | the broadest (vastest, widest), <br> latissimus (in Anatomy) |
| longus, a, um (long) | long- | longissǐmus, a, um | the longest |
| subť̌lis, e (fine) | subtil- | subtilissǐmus, a, um | the finest |

Some forms of superlative degree are formed in a special way:

| Initial form | Superlative degree | English anatomical equivalent |
| :---: | :---: | :---: |
| magnus, a, um (great) | maxǐmus, a, um | the greatest, maximus |
| parvus, a, um (little, small) | minĭmus, a, um | the least, minimus |
| inferior, ius (inferior, lower) | imus, a , um | lower, imus |
| superior, ius (superior, upper) | suprēmus, a, um | supreme, the highest |

The dictionary form of adjectives in the superlative degree is similar to adjectives of the first group with the endings -us, -a , um. They are declined also like the adjectives of the first group and their stem is determined similarly.

## § 35. PECULIARITIES OF THE USE OF THE COMPARISON DEGREES OF THE ADJECTIVES MAGNUS, A, UM AND PARVUS, A, UM in Latin anatomical terminology

The quality of great (large) or little (small) can be expressed in Latin anatomical terminology by different forms of comparison degrees but the use of these forms, as a rule, is strictly regulated. As to English equivalent forms, unfortunately, we don't observe here such a strict regulation. Moreover, different variants of above mentioned adjectives in different editions of "The International Anatomical Terminology" are used. In this textbook we have decided to use only the terms presented in the last official edition, that is "International Anatomical Terminology. FCAT. Federative Committee on Anatomical Terminology". Stuttgart, New York: Thieme, 1998. It is necessary to stress that in this edition, the above mentioned Latin adjectives in
comparative and superlative forms are namely used as English anatomical equivalents.

Let us systematize the forms of comparison degrees of the above mentioned adjectives:

| Latin positive <br> degree | English <br> equivalent | Latin <br> comparative <br> degree | English <br> anatomical <br> equivalent | Latin <br> superlative <br> degree | English <br> anatomical <br> equivalent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| magnus, a, um | great, large, <br> magnus | major, majus | greater, larger, <br> major | maxǐmus, a, <br> um | maximus, <br> major |
| parvus, a, um | little, small | minor, minus, <br> smaller | lesser, <br> smaller, minor | minǐmus, a, <br> um | minimus, little |

Now some notes about the use of Latin degree comparison forms that you should remember.

1. Forms magnus / parvus are used, if a solitary anatomical structure is indicated:
forāmen (occipitāle) magnum - foramen (occipital) magnum
arteria pancreatǐca magna - greater pancreatic artery
vena magna cerěbri - great cerebral vein
nervus auriculāris magnus - great auricular nerve
muscŭlus adductor magnus - adductor magnus muscle
nucleus magnus - large nucleus
2. Forms major / minor are used if dimensions of two similar and placed next to each other anatomical structures are compared:
ala major / ala minor - greater wing / lesser wing
pelvis major / pelvis minor - greater pelvis / lesser pelvis
nervus petrōsus major / nervus petrosus minor - greater petrosal nerve / lesser petrosal nerve
muscǔlus pectorālis major / muscŭlus pectorālis minor - pectoral major muscle / pectoral minor muscle
musculus teres major / musculus teres minor - teres major muscle / teres minor muscle

## There are some exceptions from this rule:

muscŭlus adductor magnus / muscŭlus adductor minĭmus - adductor magnus / adductor minimus
vena cardiăca magna / vena cardiăca parva - great cardiac vein / small cardiac vein
vena saphēna magna / vena saphēna parva - great saphenous vein / small saphenous vein

The forms major / minor are most common in Latin anatomical terminology. As for English equivalents of such terms there is no, unfortunately, universal pattern of systematization of their use, and some irregular translation variants sometimes should be used, compare:
anŭlus irǐdis major - outer border of iris
anŭlus irǐdis minor - inner border of iris
One more example. It isn't clear why the equivalent to arteria pancreatica magna in English is greater pancreatic artery, though there isn't any artery with the opposite sense (lesser, smaller, minor) near this artery. Such examples can be numerous.
3. Forms maxǐmus / minǐmus are used in two meanings:
a) in the meaning of the positive degree parvus (little):
digitus minǐmus - little finger (in the list of the terms of general anatomy).
But in terms with the noun muscle are so-called Latin Technical Termini (naturally, in English pronunciation as in other similar cases) used:
muscǔlus extensor digǐti minǐmi - extensor digiti minimi
muscǔlus adductor digitti minǐmi brevis - adductor digiti minimi brevis
muscǔlus oppōnens digǐti miň̌mi - opponens digiti minimi
In these cases the English equivalent minimus is to be understood as "the least".
b) forms maximus / minimus only in the meaning the greatest / the least are used in the following terms:
muscŭlus glutēus maxǐmus - gluteus maximus muscle
musculus gluteus minǐmus - gluteus minimus muscle
muscǔlus scalēnus minǐmus - scalenus minimus muscle
And only in one case the English form of the superlative degree is used:
foramǐna venārum minimārum - openings of the smallest (cardiac) veins

## § 36. ExERCISES

1. Write down the dictionary form of each word, translate it into English and make up the Genitive form of each word combination:
ala major; cartilāgo alaris major; cornu majus; facies anterior; ganglion cervicāle superius; incisūra vertebrālis inferior; ligamentum longitudināle anterius; nervus alveolāris inferior; pervis major; spina tympanǐca major; sulcus minor, tubercŭlum majus
2. Write down the dictionary form and translate into English:
arcus anterior atlantis; arteria thyroidea ima; concha nasālis suprēma; crista tubercŭli majōris; facies anterior partis petrōsae; fossa cranii anterior; labium faciēi inferius; muscŭlus longisš̌mus capǐtis (thorācis); muscǔlus palpěbrae superiōris; nervus splanchnǐcus imus, paries anterior gastris; pars liběra membri superiōris; plica duodēni major; spina iliăca posterior inferior; sulcus sinus petrōsi inferiōris; vena saphēna parva
3. Write down the dictionary form and translate from English into Latin:
adductor magnus muscle; anterior ethmoidal opening; bursa of the broadest muscle of back; crest of greater tubercle; gluteus minimus muscle; great
auricular nerve; lesser horn; greater palatine groove; greater petrosal nerve; groove for inferior petrosal sinus; groove for lesser petrosal nerve; highest nuchal line; inferior surface of the tongue; large nucleus; latissimus dorsi (muscle); lesser pelvis; lesser splanchnic nerve; lesser wing of sphenoidal bone; lower articular process; lower lip; major sublingual duct; posterior longitudinal ligament; small saphenous vein; smaller rhomboid muscle; superior nerve node; teres minor muscle; upper (lower) head

Attention! Constructions with the preposition for + adjective + noun are to be translated into Latin as the Genitive form without a preposition: canal for vertebral artery - canālis arteriae vertebrālis.

## § 37. Vocabulary to lesson 5

## Latin-English vocabulary Nouns of the 1st declension

ala, ae f - wing
concha, ae f - concha (shell-shaped hole)
crista, ae f - crest
fossa, ae f - fossa ( little hole)
palpĕbra, ae f - eyelid
plica, ae f - fold
spina, ae f - spine

## Nouns of the 2nd declension

duodēnum, in - duodenum
labium, i n - lip
membrum, in - limb

## Nouns of the 3rd declension

atlas, $n$ tis $m$ - atlas (the first cervical vertebra)
cartilāgo, ǐnis f — cartilage
gaster, tris f - stomach
paries, ětis $m$ - wall
pelvis, is f - pelvis
thorax, ācis m - thorax, chest
Adjectives of the 1st group
imus, a, um - imus (ima), lower
longissǐmus, a, um - the longest
parvus, a, um - little, small
saphēnus, a, um - saphenous
suprēmus, a, um - supreme, the highest
thyr(e)oideus, a, um - thyroid
Adjectives of the 2nd group
alveolāris, e - alveolar
cervicālis, e - cervical
longitudinālis, e - longitudinal
vertebrālis, e - vertebral
Adjectives in the form of comparative degree
anterior, ius - anterior
posterior, ius - posterior
superior, ius - superior
inferior, ius - inferior
major, ius - major, greater
minor, ius - minor, lesser, smaller

## English-Latin glossary

anterior - anterior, ius
auricular - auriculāris, e
adductor - (muscŭlus) adductor, ōris m
back - dorsum, in
broadest - latissǐmus, a, um
bursa (pouch, sac) - bursa, ae f
ethmoidal - ethmoidālis, e
gluteal - glutēus, a, um
greater - major, jus
head - caput, ǐtis n
highest - suprēmus, a, um
imus, ima - imus, a, um
inferior - inferior, ius
large - magnus, a, um
latissimus - latissimmus, a um
lesser - minor, us
lip - labium, in
longitudinal - longitudinālis, e
lower - inferior, ius
magnus, magnum - magnus, a, um
major - major, jus
minimus - minǐmus, a, um
minor - minor, us
nerve node - ganglion, in
nucleus - nucleus, i m
nuchal - nuchālis, e
pectoral - pectorālis, e
petrosal - petrōsus, a, um
rhomboid - rhomboideus, a, um
saphenous - saphēnus. a, um
smaller - minor, us
sphenoidal - sphenoidālis, e splanchnic - splanchnǐcus, a, um
superior, upper - superior, ius
thyroid - thyr(e)oideus, a, um

## Lesson 6 <br> THE MASCULINE GENDER IN THE THIRD DECLENSION OF NOUNS. NAMES OF MUSCLES PERFORMING DIFFERENT FUNCTIONS

## § 38. MASCULINE NAMES IN THE THIRD DECLENSION <br> FROM THE POINT OF VIEW OF THEIR ENDINGS <br> in the Nominative and the Genitive

All masculine names in the third declension may be grouped according to the following table:

| Nominative ending | Genitive ending | Example | Exceptions |
| :---: | :---: | :---: | :---: |
| -er | $\begin{aligned} & \text {-ēris } \\ & \text {-ěris } \\ & \text {-tris } \end{aligned}$ | trochanter, ēris m trochanter vomer, ěris $m$ vomer venter, ntris m belly of the muscle | cadāver, ěris n cadaver, dead body tuber, ĕris n tuber, tuberosity gaster, tris f stomach mater, tris f mater, cerebral coat |
| -es | -ědis <br> -ětis | pes, pedis m foot paries, étis $m$ wall |  |
| -ex | --̌cis | cortex, 亿̌cis m cortex, crust |  |
| -o | $\begin{aligned} & \text {--̌̌nis } \\ & \text {-ōnis } \\ & \hline \end{aligned}$ | homo, ǐnis m man pulmo, ōnis m lung |  |
| -or | -ōris | tumor, ōris m tumor | arbor, őris f tree cor, cordis n heart |
| -os | -oris | flos, floris m flower | os, oris n mouth os, ossis n bone |

Learning by heart this table helps constitute agreement of adjectives and nouns.

## § 39. SOME EXPLANATIONS TO THE EXCEPTIONS PRESENTED IN THE TABLE

1. The noun arbor is used to denote two anatomical structures having a shape similar to a tree:
a) arbor bronchiālis (bronchial tree)
b) arbor vitae cerebelli (arbor vitae of cerebellum, medullar body of cerebellum having a form of a tree in its sections).
2. The noun mater in the combination with adjectives takes the second place:
a) dura mater encephăli (cranialis) - dura mater of brain (cranial dura mater)
b) pia mater medullae spinālis - spinal pia mater
c) arachnoidea mater - arachnoid mater

## § 40. LATIN NAMES OF MUSCLES PERFORMING DIFFERENT FUNCTIONS

Latin names of muscles performing different functions (rotation, raising, pressing, bending and so on) consist of two words. The noun muscūlus (m.) is put in the first place with the name of the muscle following it:
m. (muscŭlus) levātor - Levator
m. (muscŭlus) massēter - Masseter
m. (muscŭlus) tensor - Tensor

As we see, English equivalents contain merely the name of a muscle. This rule relates to all muscle names of English anatomical terms.

It is important to remember that in Latin terms the following strict word order of muscle names is observed.

1. The noun muscle takes the 1 st place.
2. The name of muscle takes the 2 nd place.
3. The name of the structure, where the muscle is functioning, takes the third place and this name consisting of one or two words is always presented in the Genitive.
4. If the muscle has an adjective (long, short, vast and so on), this adjective is the last in the combination:

Extensor digiti minimi - muscǔlus extensor digĭti minĭmi
Flexor pollicis brevis - muscǔlus flexor pollǐcis brevis
Pronator quadratus - muscǔlus pronātor quadrātus
Tensor veli palatini - muscǔlus tensor veli palatīni
Levator anguli oris - muscǔlus levātor angŭli oris
As we can see, Latin technical terms predominate in English equivalents. Genuine English names are absent and Latin words are transliterated.

As to the Latin names of muscles which denote different functions, they are, as a rule, nouns of the third declension with the ending -or, more seldom -er. To be more precise, 18 muscles have the ending -or and only 3 the ending -er.

In two cases, there are several muscle names to denote the same function. So muscles named arrector, cremaster, levator may fulfill elevation. The muscles compressor, constrictor, sphincter fulfil compression. In these cases every muscle has its certain sphere of application which is to be memorized.

## § 41. ExERCISES

1. Give the dictionary form of every word and translate from Latin:
ala voměris; arachnoidea mater; arbor vitae cerebelli; cadāver homǐnis; cortex renis; dura mater craniālis seu dura mater encephăli; paries externus ductus cochleāris; paries gastris posterior, pars superior pedis dextri; pia mater spinālis; tumor pariětis gastris; venter anterior muscǔli digastrǐci; vestibǔlum oris
2. Write down the dictionary form and translate into Latin:
angle of mouth; bronchial tree; cardiac notch of left lung; dorsal artery of foot; frontal tuber of cranium; greater trochanter and lesser trochanter; intelligent man (as a biological species); parietal tuber; pelvic part of ureter; posterior wall of stomach; right border of heart; sole of the foot; vomerine groove (=groove of vomer)
3. Write down the dictionary form and translate into English:
muscǔlus adductor diǧ̌ti minǐmi; muscǔlus levātor labii superiōris; muscǔlus levātor scapǔlae; muscǔlus pronātor quadrātus; muscŭlus sphincter pupillae; muscŭlus tensor fasciae latae; pars profunda muscŭli massetēris
4. Write down the dictionary form and translate from English into Latin:

Adductor minimus; Depressor of lower lip; Extensor indicis; Flexor digiti minimi brevis; Flexor pollicis longus; Rotator of neck; inferior Constrictor of pharynx; Tensor veli palatini

## § 42. Vocabulary to lesson 6

## Latin-English dictionary

 Nouns of the 1st declensionfascia, ae f - fascia
planta, ae f - sole
pupilla, ae f - pupil
scapǔla, ae f - scapula, shoulder blade
vita, ae f - life

## Nouns of the 2nd declension

cerebellum, in - cerebellum
digitus, i m - finger
vestibǔlum, in - vestibule
Nouns of the 3rd declension
m . adductor, ōris m - adductor (bringing muscle)
arbor, ǒris f - tree
arbor vitae - arbor vitae
cadāver, ěris n - cadaver (dead body)
cortex, ǐcis m - cortex (crust)
homo, ǐnis m - man
m . levator, ōris m - levator (elevating muscle)
mater, tris f - mater (cerebral coat)
m. massēter, ēris m - masseter (chewing muscle)
os, oris n - mouth
pes, pedis m - foot
m . pronātor, ōris m - pronator (muscle turning the forearm)
ren, renis $m$ - kidney
seu - or
m. sphincter, ēris $m$ - sphincter (compressing muscle)
m . tensor, ōris m - tensor (straining muscle)
tumor, ōris m - tumor (swelling, growth)
vomer, ēris m - vomer
venter, tris m - belly (of the muscle)
Adjectives of the 1st group
arachnoideus, a um - arachnoid
digastrǐcus, a um - digastric
durus, a, um - solid
dura mater - dura mater
latus, a, um - broad
fascia lata - fascia lata
quadrātus, a, um - square, quadrate (muscle), quadratus (pronator)

## Adjectives of the 3rd group

cochleāris, e - cochlear
craniālis, e - cranial
spinālis, e - spinal

## English-Latin glossary

Adductor (bringing muscle) - m. adductor, ōris m
border - margo, ǐnis m
bronchial - bronchiālis, e
Constrictor (compressing muscle) - m. constrictor, ōris m
Depressor (lowing muscle) - m. depressor, ōris m
digitus, digiti - digǐtus, i m
dorsal - dorsālis, e
Extensor (unbending muscle) - m. extensor, ōris m
Flexor (bending muscle) - m. flexor, ōris m
foot - pes, pedis m
frontal - frontālis, e
heart - cor, cordis n
index, indicis (index finger) - index, ǐcis m
lung - pulmo, ōnis m
man - homo, ǐnis m
mouth - os, oris $n$
palatinum, palatine - palatīnus, a, um
parietal - parieālis, e
pelvic - pelvǐcus, a, um
pharynx - pharynx, yngis m
pollex, pollicis (thumb) - pollex, ǐcis m
Rotator (rotating muscle) - m. rotātor, ōris m
stomach - gaster, tris f
Tensor (straining muscle) - m. tensor, ōris m
tree - arbor, ŏris f
trochanter - trochanter, ēris m
ureter - urēter, ēris m
velum (curtain) - velum, in
vomer - vomer, ěris m
wall - paries, êtis m

## Lesson 7

## FEMININE GENDER IN THE THIRD DECLENSION NOUNS

## § 43. SYSTEMATIZATION OF THE FEMININE NAMES

 IN THE THIRD DECLENSIONAll feminine names in the third declension may be systematized in the following table:

| Nominative ending | Genitive ending | Examples | Exceptions |
| :---: | :---: | :---: | :---: |
| -do | --̆nis | longitūdo, ĭnis f length | tendo, ı̆nis m tendon, sinew |
| -go | --̆nis | cartilāgo, ĭnis f cartilage | margo, ĭnis m border, edge |
| -io | -ōnis | articulatio, ōnis f joint |  |
| -as | -ātis | cav̌tas, ātis f cavity | atlas, ntis matlas; pancreas, ătis n pancreas; vas, vasis $n$ vessel |
| -is | $\begin{gathered} \hline \text {-is } \\ \text { (parisyllaba) } \end{gathered}$ | cutis, is f skin | axis, is m axis canālis, is m canal unguis, is m nail |
| -is | -idis (imparisyllăba) | pyrămis, ǐdis f pyramid | pulvis, erris m powder sanguis, ĭnis mblood |
| -us | -ūdis | incus, ūdis fincus, little bone of the ear |  |
| consonant +s | consonant + tis | pars, partis f part | dens, dentis m tooth |
| $\begin{gathered} \text { vowel }+\mathrm{x} \\ \text { (except -ex) } \end{gathered}$ | $\begin{aligned} & \text { vowel + -cis } \\ & \text { vowel + -gis } \end{aligned}$ | radix, īcis f root | fornix, ľcis m fornix, arch; hallux, ūcis m hallux, toe; coccyx, ygis m coccyx, tailbone thorax, ācis m thorax, chest |
| consonant + x | $\begin{aligned} & \text { consonant + -cis } \\ & \text { consonant + -gis } \end{aligned}$ | falx, falcis f falx, sickle phalanx, ngis f phalanx | larynx, ngis m larynx pharynx, ngis m pharynx |

## § 44. ExERCISES

1. Write down the dictionary form, translate from Latin into English:
articulatio capĭtis costae; axis bulbi externus; basis pyramĭdis renālis; cartilāgo alāris major; cavitas oris propria; cervix dentis canīni; diaměter pelvis transversa; margo ciliāris irǐdis; margo liber unguis; margo utěri dexter; meatus acustĭcus auris dextrae; os coccygis; ostium apendǐcis vermiformis; pars liběra gingīvae; plexus venōsus canālis nervi hypoglossi; regio thorācis posterior; sanguis venōsus et arteriōsus; terminatio nervi cutis; tuberositas phalangis distālis; vas lymphatĭcum superficiāle
2. Write down the dictionary form, translate into Latin:
accessory pancreas; anterior arch of atlas; blood vessel of hallux; body of nail; canal of great stony nerve; cartilage of nasal septum; cavity of thorax, ciliary margin of iris; endocrine part of pancreas; fornix of pharynx; free part of upper (lower) limb; greater palatine canal; head of phalanx; inguinal falx or conjoint tendon; knee joint; laryngeal vestibule (=vestibule of larynx); neck of the tooth; right medial division; ring-shaped part of fibrous vagina; root canal of tooth; superior ligament of incus; surface of incisor tooth; tale of pancreas; third molar tooth or wisdom tooth; tuberosity of distal phalanx; tympanic cavity of middle ear

## § 45. Vocabulary to lesson 7 <br> Latin-English dictionary <br> Nouns of the 1st declension

cauda, ae f - tail
gingīva, ae f-gingiva, gum
tunĭca, ae f - membrane

## Nouns of the 2nd declension

bulbus, i m - eyeball
diaměter, tri f-diameter
ostium, in - orifice
utěrus, i m - uterus

## Nouns of the 3rd declension

appendix, ǐcis f - appendix
auris, is $f$ - ear
cavitas, ātis f - cavity
cervix, īcis f - cervix
coccyx, ygis m - coccyx, coccygeal bone
iris, ídis f - iris (central part of the eye)
phalanx, ngis f - phalanx
pyrămis, ǐdis f - pyramid
sanguis, ĭnis m - blood
terminatio, önis $f$ - ending
unguis, is $m$ - nail

## Nouns of the 4th declension

meātus, us m - meatus (passage)
plexus, us $m$ - plexus (network, chiefly of veins or nerves)

## Adjectives of the 1st group

arteriōsus, a um - arterial
acustǐcus, a, um - auditory
canīnus, a um - canine
proprius, a, um - proper
transversus, a, um - transverse
venōsus, ā, um - venous
Adjectives of the 2nd group
alāris, e - alar
ciliāris, e - ciliary
distālis, e - distal
renālis, e - renal
superficiālis, e - superficial
vermiformis, e - vermiform

## English-Latin glossary

accessory - accessorius, a, um
blood - sanguis, innis m
cavity - cavĭtas, ātis f
ciliary - ciliāris, e
conjoint - conjunctīvus, a, um
distal - distālis, e
division - divisio, ōnis f
ear - auris, is $f$
endocrine - endocrīnus, a, um
falx - falx, falcis f
fornix - fornix, ǐcis m
hallux - hallux, ūcis m
incisor - incisīvus, a um
incus - incus, ūdis f
inguinal - inguinalis, e
iris - iris, ídis f
larynx - larynx, yngis m
limb - membrum, in
medial - mediālis, e
middle - medius, a, um
molar - molāris, e
molar tooth - dens molāris
nail - unguis, is $m$
pancreas - pancreas, ătis $n$
phalanx - phalanx, ngis $f$
tail - cauda, ae f
third - tertius, a, um
tendon - tendo, ĭnis m
tympanic - tympanǐcus, a, um
wisdom - sapientia, ae f

## Lesson 8 <br> NEUTRAL GENDER IN THE THIRD DECLENSION NOUNS

## § 46. Systematization of the neutral names OF THE THIRD DECLENSION

All neutral names in the third declension may be systematized in the following table:

| Nominative ending | Genitive ending | Examples | Exception |
| :---: | :---: | :---: | :---: |
| -al | -ālis | anı̆mal, ālis n animal |  |
| -ar | -āris | calcar, āris n spur |  |
| -e | -is | rete, is n network |  |
| -en | -ı̆nis | abdōmen, 1 inis n abdomen | lien, ēnis m spleen ren, renis m kidney pecten, ĭnis m pecten, crest |
| -ma (words of Greek origin) | -ătis | diaphragma, ătis n diaphragm | forma, ae f form; gemma, ae f bud; mamma, ae f breast; norma, ae f norm; rima, ae f rima, fissure, opening; squama, ae $f$ squamous part, scales; struma, ae f goiter |
| -ur | ǒris <br> ǔris | femur, ǒris n femur, thigh bone sulfur, ǔris n sulphur |  |
| -us | ěris ǒris uris | glomus, ěris $n$ glomus, enlargement pectus, ǒris n chest crus, cruris n (1.shank, leg; 2. crus, limb (auditory ossicle); <br> 3.bundle (of myocardium) |  |
| -ut | --1tis | caput, ittis n (head) |  |

Attention! In the noun hepar the last but one vowel of the Genitive form is short: hepătis. Moreover, the stem of this form contains the consonant " $t$ ".

## § 47. SOME EXPLANATIONS CONCERNING THE NOUNS HAVING SIMILAR ENDINGS BUT DIFFERENT GENDER AND DECLENSION

Now, after having analyzed practically all noun endings of the third declension in the Nominative and the Genitive you can see that sometimes nouns of different gender and declension may possess the same ending in the Nominative. We can single out at least three groups of such nouns.

1. The most numerous are the nouns with the final element -us in the Nominative. Such nouns are found in the 2 nd declension and are, as a rule, masculine, but, as we shall see in the pharmaceutical part of our course, the names of trees with the ending -us are feminine. Compare:
muscǔlus, i m; sulcus, i m but: Eucalyptus, if
The ending -us may have the nouns of the feminine and neutral genders belonging to the 3rd declension:
incus, ūdis f; corpus, ǒris n.
Finally, not only the nouns of the masculine gender (ductus, us m; processus, us m) have the ending - us in the 4th declension. You should memorize the noun manus, us f (hand), and in the pharmaceutical part you will come across the word Quercus, us f (oak).
2. When studying the endings of the neutral gender in the $3^{\text {rd }}$ declension you could pay attention to the two groups of the nouns with the ending -ma:
1) diaphragma, ătis $n$ (nouns of Greek origin) but 2) gemma, ae $f$ (seven nouns of Latin origin).
3. Finally, let us analyse the nouns with the ending -er. They are not very numerous and may occur among masculine nouns of the 2nd declension (cancer, cri m ). Some of them may be feminine (diameter, tri f). The nouns of the 3rd declension with such an ending may be masculine (trochanter, ēris m), feminine (mater, tris f) and neutral (tuber, ěris n).

Summing up, we have to conclude that a Nominative ending can never give us complete and correct information about the grammar status of a noun. We should memorize every noun only in the dictionary form with all its three elements. Only in this way we can avoid making bad grammar mistakes.

## § 48. EXERCISES

1. Make up grammar agreement of the adjectives with the following nouns: arcus (dentālis, e; superior, ius; venōsus, a, um); caput (longus, a, um; brevis, e; anterior, ius); cartilāgo (accessorius, a, um; major, jus; alāris, e); crus (ampullāris, e; osseus, a, um; dexter, tra, trum); ligamentum (latus, a, um; longitudinālis, e; minor, us); margo (sinister, tra, trum; teres, ětis; superior, ius); paries (posterior, ius; internus, a, um; simplex, ǐcis); rete (venōsus, a, um; articulāris, e; simplex, ǐcis); tuber (frontālis, e; anterior, ius; major, jus)
2. Write down the dictionary form and translate into English:
calicŭlus gustatorius seu gemma gustatoria; corpus adipōsum orbĭtae; corpus ossis femǒris; crus anterius capsŭlae internae; diaphragma pelvis; forāmen mastoideum ossis temporālis; glomus carotĭcum; pecten ossis pubis; porta hepătis; rima vestibŭli laryngis; segmentum renis superius; squama ossis occipitālis; systēma respiratorium
3. Write down the dictionary form of each word, translate into Latin:
accessory spleen; anterior region of thigh; body of gallbladder; central nervous system; culmen of the body of cerebellum; dorsal venous network of hand; epigastric region of abdomen; fissure for ligamentum longum of liver; forhead and occiput of head; gastric surface of spleen; hand region; inferior segment of right kidney, lactiferous duct of breast; left crus of diaphragm; mobile liver; optic chiasm; pulvinar of thalamus; rete mirabile; simple membranous crus; squamous part of frontal bone; stroma and parenchyma of thyroid gland; stroma of iris; tegmen of the fourth ventricle; the longest muscle of head

## § 49. Vocabulary to lesson 8

## Latin-English vocabulary 1st declension

capsǔla, ae f-capsula
gemma, ae f - bud
orbĭta, ae f - orbit
porta, ae f - porta (gate of the liver)
rima, ae f - fissure, opening
squama, ae f - squamous part, scales
vesīca, ae f - bladder

## 2nd declension

calicŭlus, i m (gustatorius) - bud
segmentum, in - segment
3rd declension
crus, cruris $\mathrm{n}-1$ ) shank, leg; 2) crus, limb (of auditory ossicle); 3) bundle (of myocardium)
diaphragma, ătis n - diaphragm
femur, ŏris n - femur, thigh (bone)
hepar, ătis n - liver
glomus, ěris n - body, enlargement (choroidal), glomus (aortic)
pecten, innis $m$ - pecten (crest)
pubes, is $f$ - pubis
rete, is $\mathrm{n}-1$ ) rete (mirabile); 2 ) network (dorsal venous network of hand)
systēma, ătis n - system

## Adjectives of the 1st group

adipōsus, a, um - fat
carotǐcus, a, um - carotid
felleus, a, um (=biliaris, e) - gall (+Noun)
gustatorius, a, um - taste (+Noun)
osseus, a, um - bony
respiratorius, a, um - respiratory
Adjectives of the 2nd group
ampullāris, e - ampullary
biliāris, e (=felleus, a, um) - gall (+Noun)
dentālis, e - dental
longitudinālis, e - longitudinal

## English-Latin vocabulary

breast - mamma, ae f
central - centrālis, e
chiasm - chiasma, ătis n
crus - crus, cruris n
culmen - culmen, ǐnis n
diaphragm - diaphragma, ătis
epigastric - epigastrǐcus, a, um
forhead - sincĭput, ĭtis n
fourth - quartus, a, um
gallbladder - vesīca fellea (=vesīca biliāris)
gastric - gastrĭcus, a, um
hand - manus, us f
lactiferous - lactifěrus, a, um
liver - hepar, ătis n
membranous - membranaceus, a, um
mobile - mobǐlis, e
occiput - occĭput, 九九tis n
optic - optĭcus, a, um
parenchyma - parenchy̆ma, ătis n
pulvinar - pulvīnar, āris n
rete - rete, is $n$
spleen — lien, ēnis m
stroma - stroma, ătis n
system - systēma, ătis n
tegmen - tegmen, ĭnis n
thalamus - thalămus, i m
thigh - femur, ŏris n
ventricle - vertricŭlus, i m

## Lesson 9 <br> NOMINATIVE PLURAL OF NOUNS AND ADJECTIVES

## § 50. NOMINATIVE PLURAL ENDINGS OF NOUNS AND ADJECTIVES

The Nominative plural forms for both nouns and adjectives are formed by adding the Nominative plural endings to their stem. These endings, particularly in the 2 nd , 3rd and 4th declensions, depend on the gender and declension of nouns and adjectives, as shown in this table:

| Declension | Gender | Nominative Singular | Stem | Nominative Plural endings | Nominative Plural Form |
| :---: | :---: | :---: | :---: | :---: | :---: |
| I | f | vertebra thoracica | vertebr-thoracic- | -ae | vertebrae thoracicae |
|  | m | sulcus dexter | sulc-dextr- | -i | sulci dextri |
| II | n | septum latum ganglion otīcum | $\begin{gathered} \text { sept- } \\ \text { lat- } \\ \text { gangli- } \\ \text { otic- } \end{gathered}$ | -a | septa lata ganglia otǐca |
| III | m | homo sapiens | homin-sapient- | -es | homĭnes sapientes |
|  | f | pars commūnis | part-commun- | es | partes commūnes |
|  | n | $\begin{aligned} & \text { rete } \\ & \text { mirabĭle } \end{aligned}$ | ret-mirabil- | -ia | $\begin{gathered} \text { retia } \\ \text { mirabilia } \end{gathered}$ |
|  |  | foramen anterius | foramin-anterior- | -a | foramina anteriōra |
| IV | m | processus | process- | -us | processus |
|  | n | cornu | corn- | -ua | cornua |
| V | f | facies | faci- | -es | facies |

As we can observe, only neutral nouns of the $3^{\text {rd }}$ declension have two variants. The following rules of their ending differentiation are to be memorized.

1. Neutral nouns with the endings -al, -ar, -e in the Nominative singular get the ending -ia :
animal (Nom. sing.) - animalia (Nom. plur.)
pulvīnar (Nom. sing.) - pulvinaria (Nom. plur.)
rete (Nom. sing.) - retia (Nom. plur.)
2. Neutral adjectives of the $3^{\text {rd }}$ declension except for adjectives in the comparative form get the ending -ia:

| Dictionary form | Neutral form | Stem | Nominative Plural form |
| :---: | :---: | :---: | :---: |
| acer, cris, cre | acre | acr- | acria |
| celer, ěris, ěre | celěre | celěr- | celeria |
| frontālis, e | frontāle | frontāl- | frontālia |
| brevis, e | breve | brev- | brevia |
| sapiens, ntis | sapiens | sapient- | sapientia |
| impar, ăris | impar | impar- | imparia |
| simplex, ĭcis | simplex | simplĭc- | simplĭcia |

Nouns which don't belong to the first point of the shown above rule as well as adjectives in the comparative form get the ending -a in the Nominative plural: foramen superius (sing.) - foramĭna superiōra (plur.)
caput minus (sing.) - capǐta minōra (plur.)

## § 51. Abbreviations of Nominative plural forms used In anatomical terms

A certain number of nouns in the anatomical terms is used in the shortened forms. You have to memorize these abbreviations:

| Singular form |  | Plural form |  |
| :---: | :---: | :---: | :---: |
| Full form | Abbreviation | Full form | Abbreviation |
| arteria | A. | arteriae | Aa. |
| bursa | B. | bursae | Bb. |
| forāmen | F. | foramĭna | Forr. |
| ganglion | Gangl. | ganglia | Gangll. |
| glandŭla | Gl. | glandŭlae | Gll. |
| ligamentum | Lig. | ligamenta | Ligg. |
| muscŭlus | M. | muscŭli | Mm. |
| nervus | N. | nervi | Nn. |
| nucleus | Nucl. | nuclei | Nucll. |
| ramus | R. | rami | Rr. |
| vagīna | Vag. | vagīnae | Vagg. |
| vena | V. | venae | Vv. |

## § 52. ExERCISES

1. Write down the dictionary form, translate into Latin and then make up the Nominative plural of each word combination:
cervical surface; coccygeal horn; greater palatine canal; impar ganglion; inferior nuchal line; jugular foramen; posterior tubercle; rete mirabile; sphenoid process; superior nasal meatus; temporal fossa; thoracic region; tympanic cavity; zygomatic bone
2. Write down the dictionary form and translate into English:

Aa. ciliāres posteriōres breves; cartilaǧ̌nes laryngis; Forr. palatīna minōra; Gangll. pelvǐca; Gll. thyroideae accessoriae; impessiōnes digitātae seu juga cerebralia; labia oris; Ligg. collateralia; Mm. rotatōres cervīcis; Nn. splanchnĭci sacrāles; nomĭna anatomĭca; Nucll. vestibulāres; orgăna ocŭli accessoria; ossa cranii; partes corpǒris humāni; plicae transversae recti; radīces craniāles; rami capsǔlae internae; rami cardiăci thoracicci; Rr. dorsāles linguae; regiōnes membri superiōris; systemăta genitalia viri et femĭnae; Vv. hepatĭcae dextrae; Vv. temporāles profundae
3. Write down the dictionary form and translate into Latin:
anterior and posterior divisions; auditory ossicles; blood vessels of retina; borders of the nail; cavities of the body; costal notches; cranial nerves and
sutures; eyebrows and eyelashes; general terms; incisive canals; joints of pelvic girdle; lesser palatine foramina; minor salivary glands; muscular branches of common fibular (peroneal) nerve; muscles of back proper; permanent teeth; planes, lines and regions; posterior ethmoidal cells; renal pyramids; true and false ribs; transverse folds of rectum; roots, trunks and cords of brachial plexus

## § 53. VOCABULARY TO LESSON 9

## Latin-English vocabulary

 1st declensionfemĭna, ae f - woman plica, ae f - fold
sutūra, ae f-suture
2nd declension
jugum, in - yoke
ramus, i m - branch
rectum, in - rectum
vir, i m - man
3rd declension
impressio, ōnis f — impression
nomen, ĭnis n - name
Adjectives of the 1st group
anatomǐcus, a, um - anatomical
digitātus, a, um - digitate
humānus, a, um - human
otĭcus, a, um - otic

## Adjectives of the 2nd group

alveolāris, e - alveolar
cerebrālis, e - cerebral
collaterālis, e - collateral
dorsālis, e - dorsal
genitālis, e - genital

## English-Latin glossary

brachial — brachiālis, e
branch - ramus, i m
cell - cellŭla, ae f
cord - fascicŭlus, i m
division - divisio, ōnis $f$
eyebrow - supercilium, in
eyelash - cilium, in
false - spurius, a, um
fibular (=peroneal) - fibulāris (=peronēus, a, um)
fossa - fossa, ae f
fold - plica, ae f
general - generālis, e
girdle - cingŭlum, in
jugular - jugulāris, e
impar - impar, ăris
incisive - incisīvus, a, um
line - linea, ae f
mirabile - mirabîlis, e
muscular - musculāris, e
notch — incisūra, ae f
ossicle - ossicǔlum, in
permanent - permănens, ntis
plane - planum, in
proper - proprius, a, um
retina - retĭna, ae f
salivary - salivarius, a. um
suture - sutūra, ae f
true - verus, a, um
trunk - truncus, i m
term - terminnus, i m
zygomatic - zygomatĭcus, a, um

## Lesson 10 <br> GENITIVE PLURAL OF NOUNS AND ADJECTIVES

## § 54. GENITIVE PLURAL ENDINGS OF NOUNS AND ADJECTIVES

Both nouns and adjectives get the Genitive plural forms by adding the Genitive plural endings to their stem depending mostly on noun and adjective declension, as one may see in the following table:

| Declension | Gender | Nominative <br> singular | Stems | Genitive <br> plural endings | Genitive plural <br> forms |
| :---: | :---: | :---: | :---: | :---: | :---: |
| I | f | vertēbra <br> thoracīca | vertebr- <br> thoracic- | -ārum | vertebrārum <br> thoracicārum |
| II | m | sulcus <br> dexter <br> ganglion <br> otīcum | sulc- <br> dextr- <br> gangl- <br> otic- | -ōrum | sulcōrum <br> dextrōrum <br> gangliōrum <br> oticōrum |
|  | n | m | canālis | canal- |  |
| III |  | brevis | brev- | canalium |  |
|  |  | dens <br> permanens <br> pars | dent- <br> permanent- <br> part- | -ium | brevium <br> dentium <br> permanentium <br> partium |


| Declension | Gender | Nominative singular | Stems | Genitive plural endings | Genitive plural forms |
| :---: | :---: | :---: | :---: | :---: | :---: |
| III | n | laterālis vertebrāle os simplex rete articulāre | lateral-vertebral-oss-simplic-ret-articular- | -ium | lateralium vertebralium ossium simplicium retium articularium |
|  | m | margo | margin- | -um | marginum |
|  |  | anterior | anterior- |  | anteriōrum |
|  | f | articulatio | articulation- |  | articulatiōnum |
|  |  | inferior | inferior- |  | inferiōrum |
|  | n | forāmen | foramin- |  | foramĭnum |
|  |  | majus | major- |  | majōrum |
| IV | m | arcus | arc- | -uum | arcuum |
|  | n | cornu | corn- |  | cornuum |
| V | f | facies | faci- | -ērum | faciērum |

As we can see, masculine, feminine and neutral nouns and adjectives of the third declension have two variants of the endings.

The ending -ium is added to the stems of:

1. Parisyllaba, i. e. the masculine and feminine nouns which have equal number of syllables in the Nominative and Genitive: canālis, is m canal; basis, is f base.
2. Masculine, feminine and neutral nouns, if their stem ends with two consonants: dens, dentis m tooth; pars, partis f part; os, ossis n bone.
3. Neutral nouns with the endings -al, -ar, $\mathbf{- e}$ in the Nominative singular: anı̆mal, ālis n animal; calcar, āris n calcar (spur); rete, is n net, network
4. Masculine, feminine and neutral adjectives in the positive degree, see in the table above the adjectives articulāris, e articular; brevis, e short; laterālis, e lateral; permanens, ntis permanent; simplex, ǐcis simple.

The ending -um is added to the stems of:

1. All nouns which don't belong to the three first groups of the explained above rules, see, e. g., in the table the nouns margo, innis m border, articulatio, $\overline{\text { ōnis }} \mathrm{f}$ joint; forāmen, ĭnis n opening.
2. Masculine, feminine and neutral adjectives in the comparative degree, see in the table the adjectives anterior, ius anterior; inferior, ius upper; major, jus major, larger, greater.

Some Latin nouns are used only in plural and their dictionary forms are accordingly represented in the Nominative and Genitive plural: fauces, faucium f fauces; species, èrum (speciērum) f species.

Attention! The noun vas, vasis n in singular belongs to the third declension, but in plural - to the second one. Compare: nervi vasis - nerves of a vessel, but nervi vasōrum - nerves of the vessels.

## § 55. ExERCISES

1. Write down the dictionary form of each word and make up Genitive plural form of each word combination:
anterior tubercle; costal process; floating rib; greater wing; internal base; left spur; lesser opening; lesser sublingual duct; longitudinal ligament; long root; permanent tooth; posterior surface; respiratory region; right crest; sacral horn; short muscle; simple joint; venous network; vertebral canal
2. Write down the dictionary form of each word and translate into English:
ligamenta ossiculōrum auditoriōrum; medulla ossium flava et rubra; muscŭli arrectōres pilōrum; muscŭli palāti et faucium; nervi vasōrum lymphaticōrum; ostia venārum pulmonalium; plexus cavernōsi conchārum; processus accessorius vertebrārum lumbalium; situs viscĕrum inversus; vagīnae fibrōsae digitōrum manus
3. Give the dictionary form and translate into Latin:
arteries of lower limbs; curvature of the stomach walls; dividing walls of the frontal sinuses; grooves for extensor muscle tendons; heads of the true, false and floating ribs; muscles of auditory ossicles; muscles of soft palate and faucium; nerves and vessels of vessels; nodules of semilunar cusps; sinuses of the venae cavae (Gen. plur.!); surface of the permanent teeth; tubercles of thoracic vertebrae (Gen. plur.!)

## § 56. Vocabulary to lesson 10

## Latin-English vocabulary Nouns of the 1st declension

medulla, ae f - medulla vagīna, ae f (of muscle) - sheath

## Nouns of the 2nd declension

ossicŭlum, in - ossicle
ostium, in - opening
palātum, in - palate
pilus, i m - hair

## Nouns of the 3rd declension

m . arrector, oris m - arrector
fauces, ium f - fauces
viscus, ěris n; usually Plur. viscěra, um n - viscera, inner organs
Nouns of the 4th declension
manus, us f - hand
situs, us m - site

## Adjectives of the 1st group

auditorius, a, um - auditory
cavernōsus, a, um - cavernous
fibrōsus, a, um - fibrous
flavus, a, um - yellow
inversus, a, um - inverse
ruber, bra, brum - red

## Adjectives of the 2nd group

lumbālis, e - lumbar
pulmonālis, e - pulmonary

## English-Latin glossary

cavae - cavus, a, um
curvature - curvatūra, ae f
cusp - valvŭla, ae f
extensor (unbending muscle) - m. extensor, ōris $m$
false - falsus, a, um
floating - fluctuans, ntis
limb - membrum, in
nodule - nodŭlus, in
ossicle - ossicŭlum, in
palate - palātum, in
permanent - permănens, ntis
respiratory - respiratorius, a, um
semilunar - semilunāris, e
soft - mollis, e
spur - calcar, āris n
stomach - gaster, tris f
true - verus, a, um
venae - vena, ae f
wall - paries, ětis $m$
Lesson 11
ACCUSATIVE SINGULAR AND PLURAL OF NOUNS
AND ADJECTIVES. PREPOSITIONS USED WITH THE ACCUSATIVE

## § 57. Accusative singular and plural endings

The Latin Accusative case reflects the direct object by answering the questions "Whom? What?". In this function it corresponds to the Russian case called "Винительный" or in German - to the case Akkusativ.

Both nouns masculine and feminine as well as adjectives get the Accusative forms by adding the corresponding endings to their stem, as one may see in the table below. Neutral nouns and adjectives have no special Accusative endings: Accusative singular form corresponds to the form of the Nominative singular and the Accusative plural form - to the form of the Nominative plural:

| Dec-lension | $\begin{array}{\|c} \text { Gen- } \\ \text { der } \end{array}$ | Nominative singular | Acc. sing. ending | Accusative singular form | Acc. pl. ending | Accusative plural form |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I | f | vena cava | -am | venam cavam | -as | venas cavas |
| II | m | ramus dexter sulcus palatīnus | -um | ramum dextrum sulcum palatīnum | -OS | ramos dextros sulcos palatīnos |
|  | n | ganglion otĭcum septum longum | $\begin{gathered} =\text { Nom. } \\ \text { sing. } \end{gathered}$ | ganglion otĭcum septum longum | $\begin{gathered} =\begin{array}{c} \text { Nom.pl. } \\ (-\mathrm{a}) \end{array} \\ \hline \end{gathered}$ | ganglia otǐca septa longa |
| III | m | margo anterior canālis nutriens | -em | margĭnem anteriōrem canālem nutrientem | -es | marginnes antriōres; canāles nutrientes |
|  | f | pars laterālis basis simplex pelvis major | $\begin{aligned} & \hline-\mathrm{em} \\ & (-\mathrm{im}) \end{aligned}$ | partem laterālem basim simplĭcem pelvim majōrem | -es | partes laterāles bases simplĭces pelves majōres |
|  | n | rete capillāre crus posterius | $\begin{gathered} =\text { Nom. } \\ \text { sing. } \end{gathered}$ | rete capillāre crus posterius | $\begin{gathered} =\text { Nom. pl. } \\ (-\mathrm{a},-\mathrm{ia}) \end{gathered}$ | retia capillaria crura posteriōra |
| IV | m | processus | -um | processum | -us | processus |
|  | n | cornu | $\begin{gathered} =\text { Nom. } \\ \text { sing. } \end{gathered}$ | cornu | $\begin{gathered} =\text { Nom. pl. } \\ (-\mathrm{ua}) \end{gathered}$ | cornua |
| V | f | facies | -em | faciem | -es | facies |

Some ending variants are seen in the third declension. Nouns in the Accusative singular can get endings -im or -em. The ending -im should have:

1. Nouns with the ending -sis in the Nominative singular:
basis, is f basis - basim; dosis, is f dose - dosim
2. Nouns pelvis, is f pelvis - pelvim; febris, is f fever - febrim; tussis, is f cough - tussim
§ 58. Prepositions used with the Accusative

| Preposition | Meaning | Examples | Translation |
| :---: | :---: | :---: | :---: |
| ad | 1) to, toward <br> 2) for <br> 3) during, in | ad nervum trigemǐnum ad usum externum ad morbum hypertonĭcum | to the trigeminal nerve for the external use in the hypertonic disease |
| ante | before, in front of | ante operatiōnem ante pulmōnem dextrum | before the operation in front of the right lung |
| circum | (a)round | circum liēnem | around the spleen |
| contra | for | contra febrim | for the fever |
| in | in, into, on (when answering the question "where to?", Russian "куда?") | in oesophăgum in partem dextram in canālem longum | into the oesophagus on the right part in the long canal |
| infra | below, under | infra cor | below (under) the heart |


| Prepo- <br> sition | Meaning | Examples | Translation |
| :---: | :---: | :---: | :---: |
| inter | among, between | inter vasa manus <br> inter duo ossa | among the vessels of the hand <br> between two bones |
| intra | inside | intra thorācem | inside the thorax |
| per | 1) through, via <br> 2) by (means of) | per canālem optĭcum <br> per ligamenta | through (via) the optic canal <br> by ( means of) the ligaments |
| post | after, <br> behind | post operationem <br> post costam | after the operation <br> behind the rib |
| sub | under (when answering <br> the question "where <br> to?", Russian "куда?") | sub scapŭlam dextram <br> sub ganglion <br> submandibulāre | under the right shoulder blade <br> under the submandibular <br> ganglion |
| super, <br> supra | above | super (supra) marǧ̌nem <br> sinistrum <br> supra (super) labium <br> superius | above the left margin |
| above the upper lip |  |  |  |

## § 59. ExERSICES

1. Give the dictionary form of each word, make up forms of the Nominative singular, Accusative singular and plural:
anterior margin; ascending artery; external base; frontal surface; greater pelvis; hepatic duct; left lung; lesser horn; lymphatic vessel; nasal bone; right part; respiratory system; short nerve; vertebral canal
2. Give the dictionary form of each word, translate into English:
adǐtus ad antrum; ante operationem difficilem; ante pulmonem dextrum; circum ocŭlum dextrum; in canālem dentis incisivi; in pariĕtem gastris; inter ossa; intra venam faciālem; in musculos laryngis; per os; per pelvim minōrem; per rectum; post partum; rami ad medullam oblongātam; sub cor; sub ligamenta flava
3. Give the dictionary form of each word, translate into Latin:
above the left lung; after death; among the incisors; before and after childbirth; between the leg bones; by means of the long canal; for cough; for internal (external) use; into the deep vein; inside the stomach artery; on the superior surface; round the mouth; through the abdomen; under the right kidney; via the common carotid artery

## § 60. Vocabulary to lesson 11

## Latin-English vocabulary

 Prepositions used with the Accusative$\mathrm{ad}-1)$ to; 2) for; 3 ) during
ante - before, in front of
circum - around, round
contra - against
in (to the question "where to?", Russian "куда?") — in, into, on
infra - below, under
intra - among, between (two objects)
per - through, via 2) by ( means of)
post — after (time), behind (place)
sub (to the question "where to?", Russian "куда?") — under
super, supra - above, over

## Other words

adǐtus, us $m$ - aditus
antrum, in - antrum, cave
auricularis, e - auriculare
diffičlis, e - difficult
flavus, a, um - yellow
medulla, ae f - medulla
oblongātus, a, um - oblongata (medulla)

## English-Latin vocabulary <br> Prepositions

above - super, supra
after - post
among (more than two objects) - inter
around - circum
before - ante
behind - post
between (two objects) - inter
by (means of) - per
during - ad
for - ad
in - in (to the question "where to?")
in front of - ante
inside - intra
into - in (to the question "where to?")
on - in (to the question "where to?")
round - see around
to - ad
through - per
under - infra, sub (to the question "where to?")

## Other words

ascending — ascendens, ntis
childbirth - partus, us m
cough - tussis, is f
death - mors, mortis f
leg - pes, pedis $m$
operation - operatio, ōnis f
use - usus, us m

## Lesson 12

## ABLATIVE SINGULAR AND PLURAL OF NOUNS AND ADJECTIVES. PREPOSITIONS USED WITH THE ABLATIVE

## § 61. Ablative and its formation

Ablative is the Latin case reflecting different circumstances and conditions which characterize the indirect object (mood of the action, time, place, reason and so on).

Both nouns and adjectives get the Ablative forms by adding the corresponding endings to their stems, as one may see in the table below:

| Dec-lension | Gender | Nominative singular | Abl. sing. ending | Ablative singular form | Abl. plur. ending | Ablative plural form |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I | f | vena cava | -ā | vena cava | -is | venis cavis |
| II | m | ramus dexter sulcus palatīnus | -0 | ramo dextro sulco palatīno | -is | ramis dextris sulcis palatīnis |
|  | n | ganglion otĭcum septum longum |  | ganglio otǐco septo longo |  | gangliis otĭcis septis longis |
| III | m | margo anterior canālis nutriens | $\begin{gathered} -e \\ (-i) \end{gathered}$ | margĭne anteriōre canāle nutrienti | -ǐbus | marginǐbus anterioríbus canalĭbus nutrientǐbus |
|  | f | pars laterālis <br> basis simplex | $\begin{gathered} -\mathrm{e} \\ (-\mathrm{i}) \end{gathered}$ | parte laterāli <br> basi simplǐci | -ibus | partǐbus lateralǐbus basǐbus simplicǐbus |
|  | n | rete capillāre crus posterius |  | reti capillāri crure posteriōre |  | retībus capillaríbus cruribus posterioribus |
| IV | m | processus | -u | processu | -ǐbus | processǐbus |
|  | n | cornu | -u | cornu |  | cornǐbus |
| V | f | facies | -e | facie | -ēbus | faciēbus |

Some ending variants are seen in the third declension. Nouns and adjectives in the Ablative singular can get endings -e or -i.

The ending - $\mathbf{i}$ is added to the stem of:

1. Neutral nouns with the endings -al, -ar, -e in the Nominative singular (we have already mentioned these nouns in the previous lessons): animal, ālis n - animāli; calcar, āris n - calcāri; rete, is n - reti.
2. Four feminine nouns: pelvis, is f pelvis - pelvi; febris, is f fever febri; tussis, is f cough - tussi.
3. Feminine nouns with the ending -sis: basis, is f base - basi.
4. Masculine, feminine and neutral adjectives in the positive degree as well as participles: brevis, e - brevi; capillāris, e - capillāri; simplex, ĭcis simplǐci; fluctuans, ntis - fluctuanti.

The ending ee is added to the stem of:

1. All nouns which don't belong to the first three groups of the explained above rules, - see, e. g., in the table the nouns canālis, margo, pars, crus.
2. Masculine, feminine and neutral adjectives in the comparative degree, - see in the table the adjective anterior, ius and posterior, ius.

## § 62. Prepositions used with the Ablative

| Proposition | Meaning | Examples | Translation |
| :--- | :---: | :---: | :---: |
| a, ab (before <br> a vowel) | from | a sulco rhināli <br> ab axe optĭco | from rhinal sulcus <br> from optical axis |
| cum | with | cum nervo faciāli <br> cum febri continua | with facial nerve <br> with continued fever |
| e (ex) | 1) from (about the <br> movement from within) <br> 2) of, from (about material) | e canāle sacrāli <br> e cavitāte abdomĭnis <br> ex fructībus Rosae <br> e fibris elastīcis | about the skull bones <br> from the sacral canal <br> from the abdomen cavity <br> of dog-rose fruits <br> from elastic fibers |
| in | (when answeing the <br> question "where?") in, on | in cavitāte pleurāli <br> in facie unguis | in the pleural cavity <br> on the nail surface |
| pro | for | pro reti venōso <br> guttae pro ocŭlis | for venous network <br> drops for eyes |
| sine | without | sine pancreăte <br> accessorio <br> sine dentībus serotĭnis | without accessory <br> pancreas <br> without wisdom teeth |
| sub | (when answeing the <br> question "where?") <br> under | sub cute capĭtis <br> sub narcōsi locāli | under the skin of head <br> under a local anesthesia |

## § 63. ExERCISES

1. Give the dictionary form of each word, make up the forms of the Ablative singular and plural:
accessory pancreas; continued fever; bony tissue; canine tooth; floating rib; inner base; left canal; lesser pelvis; long spur; lymphatic vessel; right region; sacral horn; short nerve; simple joint
2. Give the dictionary form of each word; translate from Latin into English:
ab angŭlo inferiōre scapŭlae; a crista capĭtis costae; cum febri continua; de structūra partium corpŏris humāni; de termĭnis generalĭbus; glandŭlae sine ductībus; in facie unguis; in regionǐbus membri superiōris; pro reti venōso;
sanguis ex vena pro analy̆si; sub muscŭlis facialībus; sub tunĭca musculāri; tunĭca e textu connectivo
3. Give the dictionary form of each word; translate from English into

## Latin:

about the abdominal muscles; a medicine from the forest plants; for external use; for nervous system; from the head to the feet; from the surface of knee; in the heart artery; in the thoracic vein; on the nose skin; under a local (general) anesthesia; with a wandering kidney; without upper wisdom teeth

## § 64. Vocabulary to lesson 12

## Latin-English vocabulary

Prepositions used with the Ablative
a, ab - from
cum - with
de - about, of
e, ex - from, of
in (when answering the question "where?") - in, on
pro - for
sine - without
sub (when answering the question "where?") - under

## Other words

connectīvus, a, um - connective
continuus, a, um - continued
faciālis, e - facial
generālis, e - general
glandŭla, ae f-gland
humānus, a, um - human
musculāris, e - muscular
scapŭla, ae f - scapula
structūra, ae f- structure
termĭnus, i m - term
tunĭca, ae f - layer, coat

## English-Latin vocabulary

anesthesia - anaesthesia, ae f
continued - continuus, a, um
forest - silvestris, e
general - generālis, e
local - locālis, e
medicine - medicamentum, in
plant - planta, ae f
wandering - migrans, ntis

## Lesson 13 <br> PREFIXES IN ANATOMICAL TERMINOLOGY

## § 65. PREFIXATION IN THE WORD BUILDING

Prefixation is the way of word building by adding prefixes to the stem of nouns or adjectives. As a result new meanings of the word are received in which any additional circumstances characteristic of the noun or adjective arise, mainly in respect of space if it concerns anatomical terms, e. g.:
brachium, i n (brachium) + ante (before) $\rightarrow$ antebrachium, i $\mathrm{n}-$ antebrachium
cervicālis, e (cervical) + endo (within) $\rightarrow$ endocervicālis, e - endocervical
cutaneus, a, um (cutaneous) + sub (under) $\rightarrow$ subcutaneus, a, um subcutaneous

## § 66. PREFIXES IN ANATOMICAL TERMINOLOGY

Both Greek and Latin prefixes are widely used in anatomical terms. Some of them have the same meaning and in these cases choosing the prefix depends only on tradition of using this or that word in a certain term. In other cases, Greek and Latin prefixes don't duplicate the meaning of each other. According to this connection, we place Greek and Latin prefixes in two tables.

Greek and Latin prefixes with identical meaning

| Meaning | $\begin{array}{c}\text { Greek } \\ \text { prefix }\end{array}$ | $\begin{array}{c}\text { Latin } \\ \text { prefix }\end{array}$ | Latin examples and English equivalents |
| :---: | :---: | :---: | :---: |
| above - under |  |  |  |
| above, over | epi- | super- | $\begin{array}{c}\text { epigastrium, i n - epigastrium } \\ \text { superficiālis, e - superficial } \\ \text { suprarenālis, e - suprarenal }\end{array}$ |
| $\begin{array}{c}\text { below, } \\ \text { under }\end{array}$ | hypo- | infra- |  |
| infre |  |  |  |
| sub- |  |  |  |\(\left.\quad \begin{array}{c}hypoglossus, a um - hypoglossal <br>

infraorbitālis, e - infraorbital <br>
sublinguālis, e - sublingual\end{array}\right]\)

| Meaning | Greek prefix | Latin prefix | Latin examples and English equivalents |
| :---: | :---: | :---: | :---: |
| part | mes- |  | mesencephălon, i n - mesencephalon, the midbrain intercostālis, e - intrecostal |
| together, joined |  |  |  |
| together, joined | $\begin{aligned} & \text { syn- } \\ & \text { sym- } \end{aligned}$ | col-, com-, con-, cor- | synostōsis, is f - synostosis; symphy̆sis, is f - symphysis; commissūra, ae f - commissure; collaterālis, e - collateral connectīvus, a, um - connective m.corrugātor, ōris m - corrugator |
| not, without |  |  |  |
| absence, denying | a-, an(before a vowel) | $\begin{gathered} \text { in-, im- } \\ \text { ir- } \end{gathered}$ | azygos (undeclinable) - azygous anony̆mus, a, um - innominate insensibĭlis, e - insensible; impar, ăris - impar; irregulāris, e - irregular |
| against, opposite |  |  |  |
| against, opposite | anti- | contra- | antitrăgus, i m - antitragus anticorpus, ŏris n - antibody contralaterālis, e - contralateral |
| from, away from |  |  |  |
| away from | apo- | a-, ab- | apocrīnus, a, um - apocrine apophy̆sis, is $f$ - apophysis m . abductor, ōris m - abductor |
| around, round |  |  |  |
| around | peri- | circum- | pericardium, i n - pericardium <br> circumorālis, e - circumoral |
| through |  |  |  |
| through | dia- | per- | diaphragma, ătis n — diaphragm perspiratio, ōnis f - perspiration |
| out of |  |  |  |
| out, out of | ec-, ex- | e-, ex- | $\begin{gathered} \text { eccrīnus, a, um - eccrine } \\ \text { effërens, ntis - efferent } \\ \text { exostōsis, is } \mathrm{f} \text { - exostosis } \\ \text { excretorius, a, um - excretory } \end{gathered}$ |

Greek and Latin prefixes without mutual semantic duplication

| Greek prefix | Latin prefix | Meaning | Latin examples and English equivalents |
| :---: | :---: | :---: | :---: |
| - | ad-, ac-, <br> af-, ap- | adition, mo- <br> vement nearer | adrenālis, e - - adrenal <br> accessorius, a, um - accessory <br> afferens, ntis - afferent <br> appendix, ícis $\mathrm{f}-$ appendix |
| - | de- | 1. removing <br> 2. downward | m. detrūsor, ōris $\mathrm{m}-$ detrusor <br> m. depressor, ōris m - depressor |
| - | dis-, dif-, di- | spreading | disseminātus, a, um - disseminated <br> diffūsus, a, um - diffuse <br> m. dilatator, ōris m-dilator |
| - | in-, im- | moving <br> inward | infundibŭlum, in - infundibulum <br> impressio, ōnis $\mathrm{f}-$ impression |


| Greek prefix | Latin prefix | Meaning | Latin examples and English equivalents |
| :---: | :---: | :---: | :---: |
| - | re- | again or <br> repeated action | reactio, ōnis $\mathrm{f}-$ reaction <br> recessus, us $\mathrm{m}-$ recessus, recess <br> reuniens, ntis - reunient |
| para- |  | beside, near | paracervix, īcis $\mathrm{f}-$ paracervix <br> paranasālis, e - paranasal |

## § 67. Greek and Latin numerals as prefixes

| Meaning | Greek prefix | Latin prefix | Latin examples and English equivalents |
| :---: | :---: | :---: | :---: |
| one | mono- | uni- | mononucleāris, e - mononuclear <br> unicellulāris, e - unicellular |
| two | di- | bi- | digastrĭcus, a um - digastric <br> bifurcatio, ōnis $\mathrm{f}-$ bifurcation |
| three | tri- | tri- | trigōnum, i n - trigonum, triangle, trigone <br> trigemĭnus, a, um - trigeminus |
| four | tetra- | quadri- | tetrăpus, ǒdos - tetrapus <br> quadrǐceps, ipĭtis - quadriceps |
| half | hemi- | semi- | hemispherium, i $\mathrm{n}-$ hemisphere <br> semicanālis, is $\mathrm{m}-$ semicanal |

## § 68. ExERCISES

1. Give the dictionary form of each word and translate into English taking into consideration the meaning of prefixes:
adhesio interthalamĭca; apparātus respiratorius seu systēma respiratorium; circumferentia articulāris; dentes decidui; eminentia collaterālis; fibrae periventriculāres; glandŭla parotidea accessoria; impressio suprarenālis; lamella circumferentiālis externa; ligamenta metacarpalia interossea; mesocōlon transversum; muscŭlus bipennātus; ossa metatarsi; plexus submucōsus; processus intrajugulāris; sectiōnes mesencephalĭci; spatium retropharyngēum; substantia perforāta interpedunculāris; symphy̆sis intervertebrālis; synchondrōsis intraocipitālis; tractus paraventriculohypophysiālis; tragus et antitrăgus auricŭlae; trigōnum cervicāle anterius; vena retromandibulāris
2. Give the dictionary form of each word and fill in the gaps with the most suitable Latin prefixes using, if necessary, Atlas of Human Anatomy:
arteria ...currens; arteria ...flexa scapŭlae; canālis ...circulāris; ligamenta ...capsularia; muscŭlus ...pressor angŭli oris; muscŭlus ...pennātus; nervus ...dūcens; orgăna ocŭli ...cessoria; recessus ...hepatĭci; vas sanguineum ...fŏrans; zona ...certa
3. Give the dictionary form of each word and fill in the gaps with the most suitable Greek prefixes using, if necessary, Atlas of Human Anatomy:
... cōlon descendens; ...condy̆lus laterālis; fossa ...helĭcis; ...gōnum habenŭlae ...encephăli; glandŭla ...statĭca; glandŭlae ...crinae; muscŭlus ...gastrĭcus; plexus ... gastrĭcus; recessus ... tympanĭcus; regio ....chondriăca;
... spherium cerebelli; spatium ...pharyngēum; tractus ... encephalǐcus nervi trigemĭni
4. Give the dictionary form of each word and translate into Latin:
accessory pancreatic duct; common interosseous artery; external intercostal muscles; fascia of forearm; interclavicular ligament; intermandibular suture; interlobar artery; intraglandular lymphatic node; interosseal nerves of leg; parapharyngeal space; paravesical fossa; preoccipital noch; semilunar folds of colon; submandibular gland; supraorbital veins; suprapleural membrane

## § 69. Vocabulary to lesson 13

## Latin-English glossary <br> Nouns of the 1st declension

auricǔla, ae f - auricle; pinna
circumpherentia, ae f - circumference
eminentia, ae f - eminence
lamella, ae f - lamella

## Nouns of the 2nd declension

antebrachium, in - antebrachium, forearm
antitrăgus, i m - antitragus
diencephălon, in-diencephalon
hemispherium, in - hemisphere
mesencephălon, in - mesencephalon
mesocōlon, in - mesocolon
metatarsus, i m - metatarsus
spatium, in - space
tragus, i m - tragus
trigōnum, in - trigone

## Nouns of the 3rd declension

adhesio, ōnis f — adhesion
antihělix, ĭcis f; anthělix, ǐcis $f$ - antihelix (anthelix)
symphy̆sis, is $f$ - symphysis
synchondrōsis, is $f$ - synchondrosis
syndesmōsis, is $f$ - syndesmosis
Nouns of the 4th declension
apparātus, us $m$ - apparatus
recessus, us $m$ - recess
Adjectives of the 1st and 2nd declensions
bipennātus, a, um - bipennate
biventer, tra, trum - two-bellied
deciduus, a, um - deciduous
digitātus, a, um - digitate
endocrīnus, a, um - endocrine
epitympanĭcus, a, um - epitympanic
incertus, a, um - incerta(zona)
interosseus, a, um - interosseal, interosseous
interthalamĭcus, a, um - interthalamic
hypochondriăcus, a, um - hypochondriac
hypogastrĭcus, a, um - hypogastric
mesencephalicus, a, um - mesencephalic

## Adjectives of the 3rd declension

circumferentiālis, e - circumferential
collaterālis, e - collateral
extracapsulāris - extracapsular
interpedunculāris, e - interpeduncular
intervertebrālis, e - intervertebral
intrajugulāris, e - intrajugular
intraoccipitālis, e - intraoccipital
metacarpālis, e - metacarpal
pancreatĭcus, a, um - pancreatic
paraventriculohypophysiālis, e - paraventriculohypophysial
periventriculāris, e - periventricular
retromandibulāris, e - retromandibular
semicirculāris, e - semicircular
suprarenālis, e - suprarenal

## English-Latin vocabulary

forearm - antebrachium, in
interclavicular - interclaviculāris, e
interlobar - interlobāris, e
intermandibular - intermandibulāris, e interosseous - interosseus, a, um
intercostal - intercostālis, e
intraglandular - intraglandulāris, e parapharyngeal - parapharyngeālis, e paravesical - paravesicālis, e preoccipital - preoccipitālis, e semilunar- semilunāris, e
submandibular - submandibulāris, e
supraorbital - supraorbitālis, e
suprapleural - suprapleurālis, e

## § 70. MODEL (SAMPLE) OF THE FINAL TEST IN ANATOMICAL TERMINOLOGY

1. Give the dictionary form of each word, translate the terms into English:
1) paries anterior gastris; 2) vestibŭlum oris; 3) margo liber unguis; 4) pecten ossis pubis; 5) partes corpŏris humāni; 6) plexus cavernōsi conchārum; 7) ostia venārum pulmonalium.
2. Give the dictionary form of each word, translate the terms into Latin:
1) deep vein of the right leg; 2) teres minor muscle; 3) groove for inferior petrosal sinus; 4) surface of incisor tooth; 5) planes, lines and regions; 6) heads of the true, false and floating ribs; 7) eyebrows and eyelashes.
3. Give the dictionary form of each word, translate the terms into Latin:
1) by means of the long canal; 2) through the abdomen; 3 ) with a wandering kidney; 4) for nervous system; 5) glands without ducts.

To cope with this final test you have to review (revise) thoroughly every home task because all the terms of this test have been taken from your exercises. But the most effective way to success is your thorough learning and preparation for every lesson during the time of your studies.

## LATIN-ENGLISH VOCABULARY

## A

$\mathbf{a}, \mathbf{a b}(\mathbf{A b l})$ from
accessorius, a, um accessory
acustĭcus, a, um auditory
ad (Acc.) 1) to; 2) for; 3) during
adhesio, $\overline{\text { onis }} \mathbf{f}$ adhesion
adipōsus, a, um fat
adǐtus, us $\mathbf{m}$ aditus
ala, ae $f$ wing
alāris, e alar
alveolāris, e alveolar
ampullāris, $\mathbf{e}$ ampullary
analy̆sis, is $\mathbf{f}$ analysis
anatomǐcus, a, um anatomical
angŭlus, $\mathbf{i}$ m angle
ante (Acc.) 1) before (time);
2 ) in front of (place)
antebrachium, in antebrachium, forearm
anterior, ius anterior
antihĕlix, ǐcis $\mathbf{f}$; anthělix,
icis $\mathbf{f}$ antihelix (anthelix)
antitrăgus, $\mathbf{i m}$ mantitragus
antrum, in antrum, cave
apex, ǐcis $m$ apex, top
apparātus, us $\mathbf{m}$ apparatus
appendix, ícis $f$ appendix
arachnoideus, a um arachnoid
arbor, ǒris $f$ tree
arbor vitae arbor vitae
arcus, us $\mathbf{m}$ arch
arteria, ae $\mathbf{f}$ artery
arteriōsus, a um arterial
articulāris, e articular
articulatio, ōnis f joint
atlas, $\boldsymbol{n t i s} \mathbf{m}$ atlas (the first cervical vertebra)
auditorius, a, um auditory
auricŭla, ae f auricle; pinna
auricularis, e auricular
auris, is $\mathbf{f}$ ear
axis, is $\mathbf{m}$ axis

## B

basis, is $\mathbf{f}$ base
biliāris, e (=felleus, a, um) gall (+noun)
bipennātus, a, um bipennate
biventer, tra, trum two-bellied
brevis, e short
bulbus, i m (ocǔli) eyeball

## C

cadāver, ěris $\mathbf{n}$ cadaver (dead body)
calicǔlus, i m (gustatorius) bud
canālis, is $\mathbf{m}$ canal
cancer, cri m cancer
canīnus, a um (dens) canine (tooth)
capsǔla, ae f capsule
caput, ǐtis $\mathbf{n}$ head
cardiăcus, a, um cardiac
carotǐcus, a, um carotid
cartilāgo, ǐnis $f$ cartilage
cauda, ae f tail
cavernōsus, a, um cavernous
cavitas, ātis f cavity
celer, ĕris, ĕre rapid, quick (pulse)
cerebellum, in cerebellum
cerebrālis, e cerebral
cervicālis, e cervical
cervix, īcis $f$ cervix
ciliāris, e ciliary
circum (Acc.) around, round
circumferentiālis, e circumferential
circumferentia, ae $f$ circumference
coccygēus, a, um coccygeal
coccyx, ygis $m$ coccyx, coccygeal
bone
cochleāris, e cochlear
collaterālis, e collateral
communǐcans, ntis communicative composittus, a, um complex concha, ae f concha (shellshaped hole)
connectīvus, a, um connective
continuus, a, um continued
contra (Acc.) against, for (cough)
cor, cordis $\mathbf{n}$ heart
cornu, us $\mathbf{n}$ horn, hornshaped process
corpus, ǒris $\mathbf{n}$ body
cortex, ǐcis $\mathbf{m}$ cortex (crust)
costa, ae frib
costālis, e costal
craniālis, e cranial
cranium, in skull
crista, ae $\mathbf{f}$ crest
crus, cruris n 1) shank, leg;
2) crus, limb (of auditory ossicle);
3) bundle (of myocardium)
cum (Abl.) with
cutis, is $\mathbf{f}$ skin

## D

de (Abl.) about, of
deciduus, a, um deciduous
dens, dentis $\mathbf{m}$ tooth
dens canīnus canine tooth
dens deciduus deciduous tooth
dens incisīvus incisor tooth
dens molāris molar tooth
dens permănens permanent tooth
dens premolāris premolar tooth
dens sapientiae wisdom tooth
dentālis, e dental
dexter, tra, trum right
diaměter, tri f diameter
diaphragma, ătis $\mathbf{n}$ diaphragm
diencephălon, in diencephalon
difficilis, e difficult
digastrǐcus, a um digastric
digitātus, a, um digitate
digǐtus, i m finger, toe
distālis, e distal
dorsālis, e dorsal
ductus, us $\mathbf{m}$ duct
duodēnum, in duodenum
dura mater dura mater
(the outermost meninx
of the brain)
durus, a, um solid

## E

e, ex (Abl.) from, of
eminentia, ae f eminence
encephălon in brain
endocrīnus, a, um endocrine
et and
epitympanǐcus, a, um epitympanic
externus, a, um external
extracapsulāris extracapsular

## F

faciālis, e facial
facies, ēi f face, surface
fascia, ae f fascia
fascia lata fascia lata
fauces, ium $\mathbf{f}$ fauces
febris, is $\mathbf{f}$ fever
felleus, a, um (= biliaris, e) gall (+noun)
femina, ae $\mathbf{f}$ woman
femur, ŏris $\mathbf{n}$ femur, thigh (bone)
fibra, ae $\mathbf{f}$ fibre
fibrōsus, a, um fibrous
flavus, a, um yellow
forāmen, ĭnis $\mathbf{n}$ opening
fossa, ae $\mathbf{f}$ fossa (little hole)
frontālis, e frontal

## G

ganglion, in nervous node
gaster, tris $\mathbf{f}$ stomach
gemma, ae $f$ bud
generālis, e general
genitālis, e genital gingīva, ae f gingiva, gum
glandŭla, ae f gland
glomus, ěris $\mathbf{n}$ a cluster of blood vessels, glomus
gustatorius, a, um taste (+noun)

## H

hemispherium, in hemisphere
hepar, ătis $n$ liver
hepaticus, a, um
homo, ǐnis $\mathbf{m}$ man
humānus, a, um human
hyoideus, a, um hyoid, sublingual (bone)
hypochondriăcus, a, um
hypochondriac
hypogastrǐcus, a, um hypogastric
hypoglossus, a, um hypoglossal, sublingual (nerve)

## I

iliăcus, a, um iliac
impar, ăris impar, unpaired impressio, ōnis fimpression imus, a, um imus (ima), the lowest in (Acc., when answering the question "where to?", Russian "куда?") in, into, on
in (Abl., when answering the question "where?", Russian "где?") in, on
incertus, a, um incerta (zona)
incisīvus, a, um (dens) incisor
incisūra, ae fincisure, slit or notch
inferior, ius inferior
infra (Acc.) below, under
inter (Acc.) among, between (two objects)
interclaviculāris, e interclavicular
intercostālis, e intercostal
interlobāris, e interlobar
intermandibulāris, e
intermandibular
internus, a, um internal
interosseus, a, um interosseal, interosseous
interpedunculāris, e interpeduncular interthalamícus, a, um interthalamic intervertebrälis, e intervertebral intra (Acc.) inside, in intraglandulāris, e intraglandular intrajugulāris, e intrajugular intraoccipitālis, e intraoccipital inversus, a, um inverse iris, ĩdis $\mathbf{f}$ iris (central part of the eye)

## J

jugum, in yoke

## L

labium, in lip
lamella, ae f lamella
larynx, yngis m larynx
latus, a, um broad
liber, ĕra, ĕrum free
ligamentum, in ligament
lingua, ae $f$ tongue
longissimus, a, um the longest
longitudinālis, e longitudinal
longus, a, um long
lumbālis, e lumbar
lymphaticus, a, um lymphatic

## M

magnus, a, um large (vein), magnus
( m. adductor), great (nerve)
major, jus major, greater, larger
mandibǔla, ae f lower jaw, mandible
manus, us $f$ hand
margo, ǐnis $\mathbf{m}$ margin, border
massēter, ēris $\mathbf{m}$ see below
m. masseter
mastoideus, a, um mastoid mater, tris $\mathbf{f}$ mater (cerebral coat) maxilla, ae f maxilla, upper jaw meātus, us m meatus (passage)
medulla, ae f medulla
membrum, i n limb
mesencephalĭcus, a, um mesencephalic
mesencephălon, i n mesencephalon
mesocōlon, i n mesocolon
metacarpālis, e metacarpal metatarsus, i m metatarsus
minor, us minor, lesser, smaller
minĭmus, a, um the least, minimus
molāris, e (dens) molar (tooth)
musculāris, e muscular
muscǔlus, i m muscle
$\mathbf{m}$. adductor, $\overline{\mathbf{o}}$ ris $\mathbf{m}$ adductor (bringing muscle)
$\mathbf{m}$. arrector, $\overline{\mathbf{o}}$ ris $\mathbf{m}$ arrector (muscle elevating hair)
m. levātor, ōris m levator (elevating muscle)
m. massēter, ēris masseter
m. pronātor, ōris m pronator (muscle turning the forearm)
m. rotātor, ōris $\mathbf{m}$ rotātor
m. sphincter, ēris $\mathbf{m}$ sphincter (compressing muscle)
m. tensor, $\overline{\mathbf{o}}$ ris $\mathbf{m}$ tensor (straining muscle)

## N

nasālis, e nasal
nasus, i m nose
nervus, i m nerve
nucleus, i m nucleus
nomen, ĭnis n name

## 0

oblongātus, a, um rather long occipitālis, e occipital
ocŭlus, i m eye
operatio, ōnis f operation
orbĭta, ae f orbit
orgănon, i n organ
os, oris $n$ mouth
os, ossis n bone
osseus, a, um bony
ossicŭlum, i n ossicle
ostium, i n opening, orifice
oticcus, a, um otic

## P

palatīnus, a, um palatine
palātum, in palate
palpĕbra, ae feyelid
pancreatǐcus, a, um pancreatic
parapharyngeālis, e parapharyngeal
paraventriculohypophysiālis, e
paraventriculohypophysial
paravesicālis, e paravesical
paries, ětis m wall
parotideus, a, um parotid
pars, partis $\mathbf{f}$ part
partus, us $\mathbf{m}$ childbirth, delivery
parvus, a, um little, small
pecten, ĭnis $\mathbf{m}$ pecten (crest)
pelvǐcus, a, um pelvic
pelvis, is $f$ pelvis
per (Acc.) 1) through, via;
2) by (means of)
periventriculāris, e periventricular
permănens, entis (dens) permanent
(tooth)
pes, pedis $\mathbf{m}$ foot
petrōsus, a, um stony
phalanx, ngis $f$ phalanx
pius, a, um (mater) pia (mater)
pilus, i m hair
planta, ae f sole
plexus, us m plexus (network, chiefly of veins or nerves)
plica, ae $f$ fold
porta, ae f porta (gate of the liver)
post (Acc.) after (time),
behind (place)
posterior, ius posterior
premolāris, e (dens) premolar
(tooth)
preoccipitālis, e preoccipital
pro (Abl.) for
processus, us $\mathbf{m}$ process
profundus, a, um deep
proprius, a, um proper
pubes, is $f$ pubis
pulmo, ōnis m lung
pulmonālis, e pulmonary
pulsus, us $\mathbf{m}$ pulse
pupilla, ae $f$ pupil
pyrămis, ĭdis f pyramid

## Q

quadrātus, a, um square, quadrate (muscle), quadratus (pronator)

## R

radix, īcis $\mathbf{f}$ radix, root
ramus, im branch
recessus, us $\mathbf{m}$ recess
rectum, in rectum
regio, ōnis fregion
ren, renis $\mathbf{m}$ kidney
renālis, e renal
respiratorius, a, um respiratory
rete, is $\mathbf{n} 1$ ) rete (mirabile);
2) network (dorsal venous of hand)
retromandibulāris, e
retromandibular
retropharyngēus, a, um
retropharyngeal
rima, ae $f$ fissure, opening
ruber, bra, brum red

## S

sacrālis, e sacral
sanguis, ĭnis mblood
saphēnus, a, um saphenous
sapiens, ntis intelligent, clever
sapientia, ae $\mathbf{f}$ wisdom
scapǔla, ae f scapula, shoulder blade
sectio, ōnis f section
segmentum, in segment
semicirculāris, e semicircular
semilunāris, e semilunar
septum, in septum, dividing wall
seu or
simplex, ǐcis simple
sine (Abl.) without
sinister, tra, trum left
sinus, us $\mathbf{m}$ sinus, hollow curvature or cavity
situs, us $\mathbf{m}$ site
spatium, in space
spina, ae f spine
spinālis, e spina
splanchnĭcus, a, um splanchnic
squama, ae $\mathbf{f}$ squamous part, scales
sternum, in sternum, breastbone
structūra, ae f structure
sub (Acc.,when answering
the question "where to?",
Russian "куда?"; Abl., when answering the question "where?", Russian "где?") under
sublinguālis e sublingual (except for nerve and bone)
submandibulāris, e submandibular
submucōsus, a, um submucous
substantia, ae $\mathbf{f}$ substance
sulcus, i m sulcus, furrow or groove
super, supra (Acc.) above, over
superficiālis, e superficial
superior, ius superior
supraorbital supraorbitālis, e
suprapleurālis, e suprapleural
suprarenālis, e suprarenal suprēmus, a, um supreme, the highest
sutūra, ae f suture
symphy̆sis, is $\mathbf{f}$ symphysis
synchondrōsis, is $\mathbf{f}$ synchondrosis syndesmōsis, is $\mathbf{f}$ syndesmosis
systēma, ătis $\mathbf{n}$ system

## T

temporālis, e temporal
teres, ětis round (except for foramen)
terminatio, ōnis f ending
termĭnus, i m term
textus, us m tissue
thoracǐcus, a, um thoracic
thorax, ācis m thorax, chest
thyr(e)oideus, a, um thyroid
tractus, us m tract
tragus, i m tragus
transverses, a, um transverse
trigōnum, in trigone
tuber, ĕris n tuber, large rounded swelling
tubercŭlum, i n tubercle, small rounded swelling
tuberosǐtas, ātis $\mathbf{f}$ tuberosity
tumor, $\overline{\text { oris }} \mathbf{m}$ tumor
(swelling, growth)
tunǐca, ae f 1) layer, coat;
2) membrane
tympanǐcus, a, um tympanic

## U

unguis, is $\mathbf{m}$ nail
utěrus, i m uterus

V
vagīna, ae f(of muscle) vagina, sheath
vas, vasis $n$ vessel
vena, ae $f$ vein
venōsus, a, um venous
venter, tris $\mathbf{m}$ belly (of the muscle)
vermiformis, e vermiform
vertěbra, ae $\mathbf{f}$ vertebra
vertebrālis, e vertebral
vesīca, ae f bladder
vestibulāris, e vestibular
vestibǔlum, i n vestibule
vir, i m man
viscus, ěris $n$; usually Plur. viscěra, um $\mathbf{n}$ viscera, inner organs
vita, ae f life
vomer, ĕris $\mathbf{m}$ vomer

## ENGLISH-LATIN VOCABULARY

A
abdomen abdōmen, ǐnis $n$
abdominal abdominālis, e
about de (Abl.)
above super, supra (Acc.)
accessory accessorius, a, um
adductor (muscŭlus) adductor, ōris m
after post (Acc.)
among (more than two objects) inter (Acc.)
anesthesia anaesthesia, ae f
angle angŭlus, i m
anterior anterior, ius
aorta aorta, ae f
apex, top apex, ǐcis m
arch arcus, us m
around circum (Acc.)
artery arteria, ae f
articular articulāris, e
ascending ascendens, ntis
auricular auricularis, e
atlas atlas, antis m
auditory auditorius, a, um

## B

back dorsum, in
base basis, is f
before ante (Acc.)
behind post (Acc.)
between (two objects) inter (Acc.)
blood sanguis, ĭnis m
body corpus, ŏris $n$
bone os, ossis $n$
bony osseus, a, um
border margo, ǐnis m
brachial brachiālis, e
brain cerěbrum, in
branch ramus, i m
breast mamma, ae f
broadest latissǐmus, a, um
bronchial bronchiālis, e bursa (pouch, sac) bursa, ae f
by (means of) per (Acc.)

## C

canal canālis, is $m$
cancer, cri m cancer
canine (tooth) canīnus, a, um (dens)
cardiac cardiăcus, a, um
carotid carotĭcus, a, um
cartilage cartilāgo, ĭnis f
cava, cavae cavus, a, um
cavity cavǐtas, ātis f
cell cellŭla, ae f
central centrālis, e
cerebellum cerebellum, In
cervical cervicālis, e
cervix cervix, īcis f
chiasm chiasma, ătis $n$
childbirth partus, us $m$
ciliary ciliāris, e
coccegeal coccygēus, a, um
colon colon, in
column columna, ae f
common commūnis, e
complex composĭtus, a, um
conjoint conjunctīvus, a, um
constrictor (compressing muscle)
muscŭlus constrictor, ōris m
continued continuus, a, um
cord fascicŭlus, i m
costal costālis, e
cough tussis, is f
cranial craniālis, e
crest crista, ae f
crus crus, cruris $n$
culmen culmen, înis $n$
curvature curvatūra, ae f
cusp valvŭla, ae f

## D

death mors, mortis $f$
deep profundus, a, um
dental dentālis, e
depressor (lowing muscle) musculus depressor, öris $m$
diaphragm diaphragma, ătis $n$
digitus, digiti digǐtus, i m
distal distālis, e
dividing divǐdens, entis
division divisio, ōnis f
dorsal dorsālis, e
duct ductus, us $m$
during ad (Acc.)

## E

ear auris, is $f$
endocrine endocrīnus, a, um
epigastric epigastrǐcus, a, um
ethmoidal ethmoidālis, e
extensor (unbending muscle)
musculus extensor, öris m
external externus, a um
eyebrow supercilium, in
eyelash cilium, in

## F

face facies, ēi f
false falsus, a, um
falx falx, falcis $f$
fascia fascia, ae f
fauces fauces, ium f (plur.)
fever febris, is $f$
fibrous fibrōsus, a, um
fibular (=peroneal) fibulāris (=peronēus, a, um)
fissure fissūra, ae f
flexor (bending muscle) musculus flexor, öris m
floating fluctuans, ntis
fold plica, ae f
foot pes, pedis $m$
for ad (Acc.), pro (Abl.)
forāmen, ĭnis n opening
forearm antebrachium, in
forest silvestris, e
forhead sincǐput, ǐtis n
fornix fornix, ǐcis m
forth quartus, a, um
fossa fossa, ae $f$
free liber, ěra, ěrum
from a, ab( Abl.); e, ex (Abl)
frontal frontālis, e

## G

gallbladder vesīca fellea
(=vesīca biliāris)
ganglion, a cluster of nervous cells
ganglion, in
gastric gastrǐcus, a, um
general generālis, e
girdle cingǔlum, in
gland glandŭla, ae f
gluteal glutēus, a, um
great magnus, a, um
greater major, jus
groove sulcus, im

## H

hallux hallux, ūcis m
hand manus, us f
head caput, ǐtis n
heart cor, cordis n
hepatic hepatĭcus, a, um
highest suprēmus, a, um
horn cornu, us n
hyoid hyoideus, a, um

## I

ima imus, a, um
impar impar, ăris
in in (Acc.,when answering the question "where to?"; Abl.,
when answering the question "where?")
incisive incisīvus, a, um
incisor incisīvus, a um
incus incus, ūdis f
index (index finger) index, ǐcis $m$
inferior inferior, ius
in front of ante (Acc.)
inguinal inguinalis, e
inner internus, a, um
inside intra (Acc.)
intelligent sapiens, entis
interclavicular interclaviculāris, e
intercostal intercostālis, e
interlobar interlobāris, e
intermandibular intermandibulāris, e
internal internus, a, um
interosseal interosseus, a, um
interosseous interosseus, a, um
into in (Acc., when answering
the question "where to?")
intraglandular intraglandulāris, e iris iris, ĭdis f

## J

joint articulatio, ōnis f
jugular jugulāris, e

## K

kidney ren, renis m
knee genu, us n

## L

lacrimal lacrimālis, e
lactiferous lactifěrus, a, um
large magnus, a, um
larynx larynx, ngis $m$
lateral laterālis, e
latissimus latissĭmus, a um
left sinister, tra, trum
leg pes, pedis $m$
lesser minor, us
ligament ligamentum, in
limb membrum, in
line linea, ae f
lingual linguālis, e
lip labium, in
liver hepar, ătis $n$
local locālis, e
long longus, a, um
longest longissĭmus, a, um
longitudinal longitudinālis, e
lower inferior, ius
lower jaw, mandible mandibǔla, ae f
lung pulmo, ōnis m
lymphatic lymphatǐcus, a, um

## M

magnus, magnum magnus, a, um
major major, jus
man homo, ǐnis m
mandible mandibŭla, ae f
margin margo, ĭnis m
mastoid mastoideus, a, um
meatus meātus, us $m$
medial mediālis, e
medicine medicamentum, in
membrane membrāna, ae f
membranous membranaceus, a, um
middle medius, a, um
minimus minǐmus, a, um
minor minor, us
mirabile mirabǐlis, e
mobile mobǐlis, e
molar molāris, e
molar tooth dens molaris
mouth os, oris $n$
muscular musculāris, e
muscle muscŭlus, i m

## N

nail unguis, is $m$
nasal nasālis, e
neck cervix, īcis f
nerve nervus, i m
nerve node ganglion, in
nervous nervōsus, a, um
network rete, is $\mathbf{n}$
node nodus, im
nodule nodŭlus, in
nose nasus, i m
notch incisūra, ae f
nuchal nuchālis, e
nucleus nucleus, i m

## 0

occipital occipitālis, e occiput occĭput, ittis n on in (Acc. to the question
"where to?", Abl. to the question
"where?")
opening forāmen, ǐnis n
operation operatio, ōnis $f$
optic optǐcus, a, um
ossicle ossicŭlum, in
oval ovālis, e

## P

palate palātum, in
palatine palatīnus, a, um
palatini (veli) palatīnus, a, um
pancreas pancreas, ătis n
pancreatis pancreas, ătis n
parapharyngeal parapharyngeālis, e paravesical paravesicālis, e
parenchyma parenchy̆ma, ătis n
parietal parietālis, e
part pars, partis $f$
pectoral pectorālis, e
pelvis pelvis, is f
pelvic pelvícus, a, um
permanent permănens, ntis
peroneal peronēus, a, um
petrosal petrōsus, a, um
phalanx phalanx, ngis $f$
pharynx pharynx, ngis m
plane planum, in
plant planta, ae f
plexus plexus, us m
pollex, pollicis (thumb) pollex,
ǐcis m
posterior posterior, ius
preoccipital preoccipitālis, e
process processus, us $m$
prominent prominnens, ntis
proper proprius, a, um
pterygoid pterygoideus, a, um pulvinar pulvīnar, āris n
pyramide pyrămis, ǐdis f

## R

radix radix, îcis $f$
rectum rectum, in
region regio, ōnis $f$
renal renālis, e
respiratory respiratorius, a, um
rete rete, is $n$
retina retĭna, ae $f$
rhomboid rhomboideus, a, um
rib costa, ae f
right dexter, tra, trum
ring-shaped (=anular) anulāris, e
root, radix radix, îcis f
rotator (rotating muscle) musculus
rotātor, ōris m
round see around

## S

sacral sacrālis, e
salivary salivarius, a. um
saphenous saphēnus. a, um
segment segmentum, in
semilunar semilunāris, e
septum septum, in
short brevis, e
sinus sinus, us $m$
simple simplex, ǐcis
skin cutis, is $f$
skull cranium, in
small parvus, a, um
smaller minor, us
soft mollis, e
sole planta, ae $f$
space spatium, in
sphenoidal sphenoidālis, e
splanchnic splanchnǐcus, a, um
spleen lien, ēnis $m$
spur calcar, âris n
squamous squamōsus, a, um
sternal sternālis, e
sternum sternum, in
stomach gaster, tris f
stony petrōsus, a, um
stroma stroma, ătis n
sublingual sublinguālis, e
submandibular submandibulāris, e
superficial superficiālis, e
superior, upper superior, ius
supraorbital supraorbitālis, e
suprapleural suprapleurālis, e
surface facies, èi f
suture sutūra, ae f
system systēma, ătis n

## T

tail cauda, ae f
tegmen tegmen, ǐnis n
temporal temporālis, e
tendon tendo, ǐnis m
tensor (straining muscle) musculus tensor, öris m
term terminnus, i m
thalamus thalămus, i m
thigh femur, ŏris $n$
third tertius, a, um
thoracic thoracǐcus, a, um
thorax thorax, ācis m
through per (Acc.)
thyroid thyr(e)oideus, a, um
tissue textus, us m
to ad (Acc.)
tongue lingua, ae f
tooth dens, dentis $m$
top apex, ǐcis m
transverse transversus, a, um
tree arbor, ǒris f
trochanter trochanter, ēris m
true verus, a, um
trunk truncus, i m
tympanic tympanĭcus, a, um

## U

under infra (Acc.); sub (Acc. to
the question "where to?", Abl. to
the question "where ?")
upper superior, ius
upper jaw, maxilla maxilla, ae $f$
ureter urēter, ēris m
use usus, us m

## V

vein vena, ae $f$
velum (curtain) velum, in
vena (vein) vena, ae $f$
venae see vena
venous venōsus, a, um
ventricle vertricŭlus, im
vertebra vertĕbra, ae $f$
vertebral vertebrālis, e
vessel vas, vasis n
vomer vomer, ěris $m$

## W

wall paries, ětis $m$
wandering migrans, ntis
wisdom sapientia, ae f

## Z

zygomatic zygomatǐcus, a, um

# Part III <br> PHARMACEUTICAL TERMINOLOGY 

# Lesson 14 <br> INTRODUCTION TO LATIN PHARMACEUTICAL TERMINOLOGY 

## § 71. GENERAL INFORMATION <br> ON LATIN PHARMACEUTICAL TERMINOLOGY

The words pharmacist, pharmaceutical, pharmacy etc. originate from the ancient Greek word pharmacon, i. e. drug, medicine. Historically, the names of drugs and their component parts as well as the names of drug forms and some other pharmaceutical terms, particularly in medical prescriptions, are given in Latin. Nowadays, the use of Latin in the pharmaceutical practice of every country depends on its national tradition and other factors. Namely, the tradition of using Latin both in drug names and medical prescriptions exists in Russia, the Republic of Belarus, the Ukraine and some other European countries.

To Latin pharmaceutical terms belong:

1. Names of drugs: Amidopyrīnum (amidopyrin), Corvalōlum (corvalol), Streptocīdum (streptocide).
2. Names of medical plants: Belladonna (belladonna), Digitālis (foxglove), Quercus (oak).
3. Names of chemical elements: Kalium (potassium), Oxygenium (oxygen), Sulfur (sulphur).
4. Adjectives: Mentha piperīta (pepper mint), Species antiasthmatǐcae antiasthmatic species), Suppositoria vaginalia (vaginal suppositories).
5. Names of drug forms: Unguentum Tetracyclīni (ointment of tetracycline), Tabulettae Myelosāni (tablets of myelosan), Tinctūra Menthae (tincture of mint).
6. Names of the parts of medical plants: Tinctūra radīcis Valeriānae (tincture of valerian root), Herba Valeriānae (herb of valerian), Flores Chamomillae (flowers of matricary).
7. Supplementary nouns and adjectives (mainly in medical prescriptions): dosis (dose), numěrus (number), talis (such).

Now let us systematize the use of capital and small letters in Latin pharmaceutical terms.

The capital letter is used:

1) In the names of drugs: Codeīnum (codeine), Furacilīnum (furacilin), Validōlum (validol).
2) In the names of medical plants: Calendŭla (calendula), Eucalyptus (eucalyptus), Frangŭla (buckhorn).
3) In the names of chemical elements: Ferrum (iron), Oxygenium (oxygen), Zincum (zinc).

Attention! Nouns of these three groups are written with capital letter in the dictionary form too: Codē̄num, in; Calendŭla, ae f; Ferrum, in.
4) As the first letter of a name of the drug form, if this name is the first in a multiword term: Linimentum Streptocīdi (liniment of streptocide), Species antiasthmatĭcae (antiasthmatic species), Tinctūra Valeriānae (tincture of valerian).
5) As the first letter of a name of the plant component, if this name is the first in a multiword term: Herba Valeriānae (herb of valerian), Flores Chamomillae (flowers of matricary), Folia Menthae piperītae (mint pepper leaves).

The small letter is used:

1. In adjectives both in the structure of a term and in the dictionary form: Mentha piperīta (piper mint) - piperītus, a, um;

Acǐdum acetylsalicylǐcum (acetylsalicylic acid) - acetylsalicylǐcus, a, um.
2. In drug form names or plant component names being not the first in the term structure as well as in the dictionary form of these names:

Acǐdum acetylsalicylǐcum in tabulettis (acetylsalicylic acid in tablets) tabuletta, ae f; acetylsalicylĭcus, a, um.

Decoctum cortĭcis Quercus (decoction of oak bark) - cortex, ǐcis m; decoctum, in.
3. If a drug form name or a plant component name is used without drug names:
unguenta et linimenta (ointments and liniments); solutio ad usum externum (solution for external use); pulvěres composĭti (compound powders); folia et flores (leaves and flowers); radix et rhizōma (root and rhizome)
4. In constructions with a preposition indicating prescription, order of drug use or way of storage:

Solutio Furacilīni ad usum externum (solution of furacilin for external use); Tabulettae contra tussim (tablets for cough); Thea medicinālis pro infantĭbus (medicinal tea for children); Mixtio pro inhalationĭbus in vitro nigro (mixture for inhalation in dark phial)

Some other peculiarities of using capital or small letter in pharmaceutical terms will be further described in the subsequent parts of this textbook.

## § 72. The drug form names

Every drug is produced in a physical form most adequate for use. Traditionally, three main forms are used: solid, semisolid and liquid.

## Solid forms:

Dragées (dragée, a French word which is used without latinization in plural and has no Latin dictionary form) - drops

Granǔla (granŭlum, i n) - granules of different form containing drug substances

Pilŭlae (pilŭla, ae f) - pills, small balls with a drug substance

Pulvěres (pulvis, ěris m) - powders
Species (species, èrum f, only Plural form) - species, mixture of different parts of medicinal plants

Tabulettae (tabuletta, ae f) - tablets
Theae (thea, ae f) - teas

## Semisolid forms

Emplastra (emplastrum, i n) - plasters
Pastae (pasta, ae f) - pastes, thick ointments
Suppositoria (suppositorium, i n) - suppositories
Unguenta (unguentum, i n) - ointments

## Liquid forms

Decocta (decoctum, in) - decoctions
Emulsa (emulsum, in) - emulsions
Extracta (extractum, i n) - extracts
Guttae (gutta, ae f) - drops (of liquids)
Infūsa (infūsum, i n) - infusions
Linimenta (linimentum, i n) - liniments
Mixtūrae (mixtūra, ae f) - mixtures
Mucilagĭnes (mucilāgo, ĭnis f) - mucilages, liquids containing mucous substances

Olea (oleum, in) - oils
Sirūpi (sirūpus, i m) - syrups
Solutiōnes (solutio, ōnis f) - solutions
Tinctūrae (tinctūra, ae f) - tinctures
Some other drug forms
Aërosōla (aërosōlum, i n) - aerosols
Capsŭlae (capsŭla, ae f) - capsules
Lamellae (=Membranŭlae) ophthalmĭcae (lamella, ae f; membranŭla, $\mathbf{a e} \mathbf{f}$ ) - ophthalmic films with drug

## § 73. COMPONENTS OF MEDICAL PLANTS

cortex, ǐcis m - cortex, bark
flos, floris $m$ - flower
folium, in-leaf
fructus, us m - fruit
herba, ae f - herb
radix, $\overline{1} c i s \mathrm{f}$ - root
rhizōma, ătis $n$ - rhizome semen, ĭnis $n-$ seed

## § 74. MEDICINAL PLANTS IN PHARMACEUTICAL TERMS

Medicinal plant names are mostly nouns of the 1st declension:
Chamomilla, ae f - matricary
Frangŭla, ae f-buckhorn
Some names are nouns of the 2 nd declension:
Leonūrus, i m - motherwort

Millefolium, in — milfoil
Less numerous are nouns of the 3rd declension:
Digitālis, is f - foxglove
Adonis, ǐdis m, f - Adonis
Very rarely nouns of the 4th declension are used: Quercus, us f - oak
One should remember that names of trees are always feminine:
Eucalyptus, if - eucalypt
Quercus, us f - oak
Some plant names consist of a noun and an adjective:
Mentha piperīta - pepper mint
Adonis vernālis - spring Adonis
Medical plant names are used:

1. In the names of liquid drug forms: Tinctūra Valeriānae - tincture of valerian; Decoctum cortĭcis Quercus - decoction of oak bark.
2. In the labels of different packages containing the components of medical plants:

Folia Urtīcae - leaves of nettle; Semen Lini - seed of flax
3. As a component of the medical prescription:

Recĭpe: Extracti Aloës fluĭdi 1 ml - Take: Liquid extract of aloe 1 ml
Recĭpe : Cortǐcis Crataegi 30,0 - Take: Cortex of hawthorn 30,0
As we see, the name of a plant component is always placed before a plant name.

## § 75. THE MORPHOLOGICAL STRUCTURE OF ONE-WORD LATIN DRUG NAMES

One- word drug names usually consist of a noun root, a suffix ( -inn- is the most common, then follow suffixes - $\overline{\mathbf{o}} \mathbf{l}$ - and -idd-), and, finally, the most common ending - um:

Codeīnum - codeine; Dibazōlum — dibazol; Saluzīdum - saluzid
In drug names specific Greek and Latin noun roots expressing certain pharmaceutical information are widely used. The knowledge of these most common morphological elements enables to write correctly complicated drug names, which is one of the main tasks of learning the pharmaceutical part of our subject. Let us memorize the first part of these morphological elements:

| Morphological <br> root | Meaning | Latin example | English <br> equivalent |
| :---: | :---: | :---: | :---: |
| -cyclin- | antibiotics-tetracycline | Tetracyclīnum | tetracycline |
| -cyclo- | making an effect on the metabolic processes | Cycloserīnum | cycloserin |
| -menth- | product including mint | Menthōlum | menthol |
| -mycīn- | antibiotics-streptomycin | Monomycīnum | monomycin |
| -myco- | antimycotic, against fungi | Mycoseptīnum | mycoseptin |
| -pyr- | influence on the body temperature | Antipyrīnum | antipyrin |
| -strept- | different pharmaceutical effects | Streptocīdum | streptocide |

You should memorize prefixes of Greek origin used to construct a drug name:

| Prefix | Meaning | Latin example | English equivalent |
| :---: | :---: | :---: | :---: |
| a-, an- <br> (before a vowel) | denying, removing | Apressīnum <br> Analgīnum | apressin <br> analgin |
| anti- | acting against | antiasthmatīcus | antiasthmatic |
| hyper- | increase, elevation | Hyperōlum | hyperol |
| hypo- | decrease, lowering | Hypothiazīdum | hypothiazid |

## § 76. Some rules of building multiword pharmaceutical terms

Every multiword Latin pharmaceutical term begins, as a rule, with a drug form name. Then, the drug name follows. If the drug form has an adjective, this adjective is the last in the term:

Extractum Crataegi fluǐdum - liquid extract of hawthorn
Tabulettae Tetracyclīni obductae - coated tablets of tetracycline
Sometimes, the drug name is used without a form name, particularly if the prescription or way of storage is indicated:

Aether pro narcōsi - ether for narcosis
Cycloserīnum in capsŭlis - cycloserin in capsules
Somatotropīnum humānum pro injectionĭbus - human somatotropin for injections

Thyreoidīnum in tabulettis - thyreoidin in tablets
Latin names of drugs with compound composition can be enclosed into quotation marks or inverted commas. But English equivalents of these names are used without quotation marks or inverted commas, compare:

Aërosolum "Camphomenum" - aerosol of camphomen
Suppositoria "Anaesthesolum" - suppositories of anaesthesol
In the vocabulary you can find indication with which nouns these specific signs are used.

## § 77. ExERCISES

1. Write down the dictionary form of each word and translate it into English:

Extractum Leonūri fluĭdum; Linimentum Aloës; Rhizōma cum radicībus Valeriānae; Sirūpus ex fructībus Rosae; Solutio "Testosterōnum" pro injectionǐbus; Suppositoria vaginalia cum Synthomycīno; Tabulettae Aspirīni obductae; Tinctūra foliōrum Eucalypti; Unguentum DibiomycIni ophthalmǐcum
2. Give the dictionary form of each word and translate into Latin:
antiasthmatic species; coated tablets of tetracycline; decoction of oak bark; tincture of pepper mint; dry extract of belladonna; ether for narcosis; herb of spring Adonis; liquid extract of hawthorn; medicinal tea for children; mint pepper leaves; ointment of mycoseptin; powder of foxglove leaves; root and
rhizome of valerian; simple and compound powders; tablets of antipyrin; tincture of matricary flowers

## § 78. Vocabulary to Lesson 14

## Latin-English vocabulary

Aloë, ës f-aloe
Aspirīnum, i n — aspirin
cum (Abl.) — with
Dibiomycīnum, i n-dibiomycine
ex (Abl.) - of
Eucalyptus, if - eucalypt
extractum, in - extract
fluĭdus, a um - liquid
folium, i n - leaf
fructus, us m - fruit
injectio, ōnis f — injection
Leonūrus, i m - motherwort
linimentum, in-liniment
obductus, a, um - coated
ophthalmícus, a, um - ophthalmic
radix, $\overline{1}$ cis f - root
rhizōma, ătis n - rhizome
sirūpus, i m - syrup
suppositorium, i n - suppository
Synthomycīnum, in - synthomycin
tabuletta, ae f - tablet
tinctūra, ae f - tincture
Testosterōnum, in - testosterone
unguentum, in-ointment
vaginālis, e - vaginal

## English-Latin vocabulary

Adonis - Adōnis, ǐdis m, f
antiasthmatĭc - antiasthmatĭcus, a, um
antipyrin - Antipyrīnum, in
bark - cortex, ǐcis m
belladonna - Belladonna, ae f
children - infantes, ium m, f
coated - obductus, a, um
compound - composĭtus, a, um
decoction - decoctum, in
dry - siccus, a, um
ether - aether, ěris m
extract - extractum, i, n
flower - flos, floris $m$
for - pro (+Abl.)
foxglove- Digitālis, is f
hawthorn - Cratāegus, if
herb - herba, ae f
leaf - folium, in
liquid - fluĭdus, a, um
matricary - Chamomilla, ae f
medicinal - medicinālis, e
mint - Mentha, ae f
narcosis- narcōsis, is f
oak - Quercus, us f
ointment - unguentun, in
pepper - piperītus, a, um
powder - pulvis, ěris m
rhizome - rhizōma, ătis n
root - radix, īcis f
simple- simplex, ǐcis
species - species, èrum f (only plur.)
spring - vernālis, e
tablet - tabuletta, ae f
tea - thea, ae f
tertracycline - Tetracyclīnum, in
valerian - Valeriāna, ae f

## Lesson 15

LATIN IN THE MEDICAL PRESCRIPTION. STANDARD VERB FORMS INDICATING ORDER AND INSTRUCTIONS IN MAKING UP THE LATIN PART OF PRESCRIPTION. GENERAL RULES OF MAKING UP THE LATIN PART OF PRESCRIPTION

## § 79. CURRENT USE OF LATIN IN MEDICAL PRESCRIPTION

The use of Latin medical prescription nowadays is still common in many states of Europe, particularly in the countries of the former USSR including the Republic of Belarus and the Russian Federation. That is why the rules of proper use of Latin in medical prescriptions are obligatory in medical university syllabus of these states. Latin inscriptions are written on the labels of drug packing, reference books, and in medical prescriptions.

## § 80. THE IMPERATIVE VERB FORMS USED IN A SIMPLE MEDICAL PRESCRIPTION

The Latin part of a medical prescription begins with the Imperative form Recĭpe: Take:. This word is addressed to a pharmacist who has to prepare and to hand over a drug to a person.

If the drug is produced by a pharmaceutical plant then the prescription includes the name of this drug which is written after Recĭpe:

Recĭpe: Unguenti Tetracyclini ophthalmici 10, 0
Take: Ointment of ophthalmic tetracycline 10, 0
Recĭpe: Extracti Crataegi fluĭdi 25 ml
Take: Liquid hawthorn extract 25 ml
After that in a new line two standard Imperative verb forms follow: Da. (Give) and Signa (Write on the label) so that the full prescription gets the following forms:

Recĭpe: Unguenti Tetracyclīni 10
Da. Signa:
Take: Ointment of tetracycline 10,0
Give. Write on the label:
Recĭpe: Extracti Crataegi fluĭdi 25 m
Da. Signa:
Take: Liquid hawthorn extract 25 ml
Give. Write on the label:
One should pay attention to the fact that both the drug form and the drug name after Recĭpe are in the Genitive form. This case form depends on the quantity of the drug administered mainly in gram amounts (indicated in decimal points without the abbreviation gr.) and milliliter amounts with the abbreviation ml :


After the standard expression Signa - Write on the label - goes the signature where the physician indicates the way of using the drug in the patient's native language.

So - from Recĭpe to Signa - that is how the Latin part of a simple prescription, when the drug is kept in a drugstore in the prepared form, is written.

## § 81. THE CONJUNCTIVE FORMS IN MEDICAL PRESCRIPTION

The Imperative verb forms can be substituted (with some exception) for the Conjunctive mode forms. These Conjunctive forms are translated into English with the word combination "let it be" + Participle II:

| Imperative <br> form | English <br> equivalent | Conjunctive form | English equivalent |
| :---: | :---: | :---: | :---: |
| Adde | Add | Addātur | Let it be added |
| Da | Give | Detur <br> Dentur tales doses | Let it be given <br> Let be given of such doses |
| Misce | Mix | Misceātur | Let it be mixed |
| Repēte | Repeat | Repetātur | Let it be repeated |
| Signa | Write on the label | Signētur | Let it be labelled |
| Sterilĭsa! | Sterilize! | Sterilisētur! | Let it be sterilized! |

One should remember that the Imperative form Recĭpe can never be replaced by the Conjunctive one.

The use of the Imperative or Conjunctive forms depends only on the physician writing a medical prescription. As to students, they are to be able to write correctly the grammar form of an order or an instruction according to the initial Latin or English verb form.

## § 82. The structure of a COMPLEX medical prescription

Sometimes the physician asks the pharmacist to prepare a drug in the pharmacy. In this case, he writes down all the components of this drug. Such a prescription is called a complex one. Naturally, in such a prescription the physician indicates some components to be mixed: Misce - Mix. He can also define more precisely for what purpose the mixture is necessary - that is for making some drug form. In this case, two forms are used: fiat for the nouns in singular and fiant for the nouns in plural:

Misce, fiat pulvis - Mix to make a powder
Misce, fiant suppositoria vaginalia - Mix to make vaginal suppositories
One should remember that the Imperative form Misce is only used in the combination with the forms fiat and fiant.

Sometimes, the physician indicates in which form and in what amount the drug is to be prepared. In this case, he writes down these standard forms:

Da (Dentur) tales doses numěro ... in tabulettis (ampullis, capsŭlis etc) Give (Let be given) in such a dose amount... in tablets (ampoules, capsules etc.).

If two or more components are taken in the same amount, the dose is indicated only after the latter one, and the adverb ana "of each" is written before this amount:


Now, let us see some complex medical prescriptions with different standard phrases:

| Recĭpe: Sulfadimezīni | Take: Sulphadimezine |
| :--- | :--- |
| Streptocīdi | Streptocide |
| Synthomycīni ana 1,0 | Synthomycin of each 1,0 |
| Misce, fiat pulvis | Mix to make a powder |
| Detur Signētur: | Let it be given |
|  | Let it be labelled: |
| Recĭpe: Euphyllīni | Take: Euphylline |
| Butyri Cacao 2,0 | Cocoa oil 2,0 |
| Misce, fiat suppositorium | Mix to make a suppository |
| Da tales doses numěro 6 | Give such a dose in the amount 6 |
| Signa: | Write on the label: |

§ 83. Some peculiarities of quantity expression IN A MEDICAL PRESCRIPTION
Sometimes, the amount of oils or other liquids can be indicated in drops. The number of drops is written in Roman figures. If one drop is indicated, so the Accusative singular form guttam is used, if more than one, the Accusative plural form guttas is used:

Recǐpe: Olei Menthae piperītae guttam I
Take: Mint pepper oil I drop
Recĭpe: Olei Eucalypti guttas V Take: Eucalypt oil V drops
In some cases, the physician doesn't indicate the dosage of a complex prescription component and lets the pharmacist determine the quantity of this component on his own. In this case, the standard expression quantum satis - in sufficient amount - is used:

Recĭpe: Chinosōli 0,03 Take: Chinosol 0,03
Acǐdi boricci 0,3
Tannini 0,06
Olei Cacao quantum satis,
fiat suppositorium vaginale
Da tales doses numěro 6
Signa:
Boric acid 0,3
Tannin 0,06
Cocoa oil in sufficient amount to make a vaginal suppository Give such a dose in the amount 6 Write on the label:

## § 84. Some important rules For making up the Latin part OF A MEDICAL PRESCRIPTION

1. Every new line begins with capital letter.
2. Every first letter of the next new line is written strictly under the first letter of the previous one.
3. If the prescription text is to be continued in the next line, the first letter in the next line should begin under the fourth letter of the previous one.
4. Any correction in the prescription text is forbidden.

## § 85. MORPHOLOGICAL ROOTS OF PLANT ORIGIN INDICATING ALKALOIDS AND GLYCOSIDES WITH DIFFERENT PHARMACEUTICAL EFFECTS

| Morphological roots | Latin examples | English equivalents |
| :---: | :---: | :---: |
| -anth- | Galanthamīnum, in Helianthus, i m | galanthamine sunflower |
| -eph-, -ephedr-, -phedr- | Ephatīnum, in <br> Ephedrīnum, in <br> Theophedrīnum, in | ephatin ephedrin theophedrin |
| -glyc(y)- | Glycerīnum, i n <br> Corglycōnum, in <br> Glycyrrhīza, ae f <br> Sed: Glucōsum, in | glycerin <br> corglycon licorice <br> But: glucose |
| -phyll- | Euphyllīnum, in Platyphyllīnum, in | euphylline platyphylline |
| -phyt | Phytīnum, in Phytolysīnum, in | phytin phytolysin |
| -stroph- | Strophanthus, i m <br> Strophosānum, in | strophanthus strophosan |
| -the(o)- | Theobromīnum, in Theophyllīnum, in | theobromine theophylline |

## § 86. ExERCISES

1. Give the dictionary form of each word, translate the terms into English:

Capsǔlae Phytomenadiōni; Emulsum olei Helianthi; Granŭla Glycyrami; Pulvis Phytīni pro infantïbus; Solutio Corglycōni in ampullis; Solutio Glucōsi pro injectionǐbus; Suppositoria cum Euphyllīno; Tabulettae "Theophedrinum"; Theophyllīnum in tabulettis
2. Give the dictionary form of each word, translate the terms into Latin:
aerosol of ephatin; dry (liquid) extract of licorice; glyceric solution of ichthyol; oily solution of phytomenadion; pectoral species; tincture of strophanthus; sunflower oil for emulsion; suppositories with theophylline; sublingual tablets of glycin
3. Write down the dictionary form of the nouns and adjectives as well as standard verb forms indicating order or instruction in the medical prescription; translate the texts of medical prescriptions into Latin:

1. Take: Soluble streptocid 5,0
Solution of glucose $10 \%-$
100 ml
Mix. Let it be sterilized!
Give.
Write on the label:

Write on the label:

Cocoa oil 2,0
Mix to make a rectal
suppository
Give.
Write on the label:


## § 87. Vocabulary to lesson 15

## Latin-English vocabulary

ampulla, ae f - ampoule
capsŭla, ae f-capsule
Corglycōnum, i n - corglycon
Glucōsum, i - glucose
Glycyrāmum, i n- glycyram
granŭlum, i n - granule
emulsum, i n - emulsion
Euphyllīnum, in-euphylline
Helianthus, i m - sunflower
infans, ntis $m, f —$ child
Phytīnum, in - phytin
Phytomenadiōnum, in-phytomenadion
pulvis, ěris $m$ - powder
solutio, $\overline{\text { onis }} \mathrm{f}$ - solution
tabuletta, ae f - tablet
Theophedrīnum, in - theophedrin
Thophyllīnum, i n - theophylline

## English-Latin vocabulary

aerosol - aërosōlum, in
althea - Althaea, ae f
ampoule - ampulla, ae f
capsule - capsŭla, ae f
chloroform - Chloroformium, in
cocoa - Cacāo (without a dictionary form)
extract - extractum, in
ephatin - Ephatīnum, in
emulsion - emulsum, i n
eucalyptus - Eucalyptus, if
flax - Linum, i n
glucose-Glucōsum, in
glyceric - glycerinōsus, a, um
glycin - Glycīnum, i n
ichthyol - Ichthyōlum, in
leave - folium, in
licorice - Glycyrrhīza, ae f
lily of the valley - Convallaria, ae f
liniment - linimentum, in
nitroglycerin - Nitroglycerīnum, in
oil-oleum, in
oily - oleōsus, a, um
pectoral - pectorālis, e
phytomenadion - Phytomenadiōnum, in
rectal - rectālis, e
seed - semen, ĭnis n
soluble - solubĭlis, e
solution - solutio, ōnis f
species - species, ērum f (only plural)
streptocide - Streptocīdum, in
strophanthine - Strophanthīnum, i n
strophanthus - Strophanthus, i m
sublingual - sublinguālis, e
sunflower - Helianthus, i m
theophylline - Theophyllīnum, in
up to - ad
vaseline - Vaselīnum, in

## Lesson 16

## THE USE OF THE ACCUSATUVE OF SOME PHARMACEUTICAL FORMS IN THE FIRST LINE OF A MEDICAL PRESCRIPTION

## § 88. GENERAL INFORMATION ON THE USE OF THE ACCUSATIVE OF THE PHARMACEUTICAL FORMS IN A MEDICAL PRESCRIPTION

The Accusative of some pharmaceutical forms is used only in a simple medical prescription. This is the way of prescribing tablets, drops, suppositories, ophthalmic films, sponges for different medical purposes, aerosols. The name of these pharmaceutical forms is written in the Accusative singular or plural. The Latin drug name in the Nominative form is sometimes enclosed in inverted commas or quotation marks, which are omitted in the English text, where in this case the common construction with preposition "of" is used. The amount of the prescribed drug is hereby not indicated in grams or in milliliters but is expressed by the word "numerrus" (number) in the Ablative form (numerro) and a common figure. In the second line the standard verb forms are written:

| Recĭpe: Tabulettas "Antistrumīnum" | Take: Tablets of antistrumin |
| :--- | :---: |
| numěro 50 | number 50 |
| Detur. | Let it be given |
| Signetur: | Let it be labelled: |
| Recĭpe: Tabulettas Aloës | Take: Coated tablets of aloe |
| obductas 0,05 numěro 20 | number 20 |
| Da | Give. |
| Signa: | Write on the label: |

As in English drug names inverted commas or quotation marks are not used, it is impossible when translating to find out which Latin equivalent drug name with these specific signs is to be written. That is why when translating from English into Latin we have to consult the dictionary and to find out whether the drug name is enclosed in inverted commas or quotation marks or not. So, if we see in the dictionary: psoriasin (ointment) - Unguentum "Psoriasīnum"; antistrumin (tablets) - Tabulettae "Antistrumīnum"; Benspar (capsules) - Capsulae "Bensparum", we know, how the Latin drug name is to be written correctly, for example:

Take: Capsules of benspar number 100 - Recĭpe: Capsŭlas "Benspar" Give.
Write on the label:
numěro 100
Da. Signa:

Now let us see in detail the use of different pharmaceutical forms in the Accusative.

## § 89. THE PRESCRIPTION OF TABLETS IN THE ACCUSATIVE FORM

The drug prescription in tablets may proceed in three forms.
In the first case after Recĭpe the Accusative singular form Tabulettam is written, then follow the drug name in the Genitive form and the dose. In the second line of the prescription the instruction Da (Dentur) tales doses numěro... in tabulettis is written and after that the standard verb form Signa (Signetur) follows:

Recǐpe: Tabulettam Paracetamoli 0,3 Take: Tablet of paracetamol 0,3
Da tales doses numero 6 in tabulettis
Signa:
Give such a dose in the amount 6 in tablets Write on the label:

In the second case after Recĭpe the Accusative plural form Tabulettas is written, then follow the drug name in the Genitive form and figures indicating the amount of active medical substance of a tablet and, finally, the dosage expressed by the "numero" and a figure:

Recĭpe: Tabulettas Paracetamōli 0,3 Take: Tablets of paracetamol 0,3 numěro 6
Da.
Signa:
number 6
Give
Write on the label:

But the same drug can be prescribed in a traditional form indicating the drug quantity, and that is the third way of drug prescribing in the tablet form. In this case after Recĭpe the drug name and its dose follow. In the second line the instruction Da (Dentur) tales doses numerro 6 in tabulettis and, finally, the standard form Signa (Signetur) are written:

Recĭpe: Paracetamōli 0,3
Da tales doses numěro 6 in tabulettis
Signa:

Take: Paracetamol 0,3
Give such a dose in the amount 6 in tablets
Write on the label:

It is absolutely imperative that every physician is to know all the ways of writing out medical prescriptions. But the choice of a prescription form is up to him.

## § 90. The Prescription of drops in the Accusative form

Drops (as the equivalent in Latin pharmaceutical terminology the French word "dragées" is used) are now prescribed mainly in the plural form. From the grammar point of view, the "dragées" is considered as Accusative depending on the word Reč̆pe, but as a French word, it has no case and dictionary form. The prescription regulations for drops are the following. After the Recĭpe follow the form Dragées, the drug names in inverted commas (quotation marks) or in the Genitive form and the Ablative case numero with a figure indicating the dose:

| Recipe: Dragées "Undevitum" numero 3 | Take: Drops of undevit |
| :---: | :---: |
| Detur. | number 30 |
| Signetur: | Let it be given |
|  | Let it be labelled: |

One should add that sometimes, an other order of drops prescription is used. In this case, after Recĭpe the singular form Dragée is written with the drug name in the Genitive and a figure indicating the dose. In the second line follows the phrase Da (Dentur tales doses) numero...:

Recĭpe: Dragée Diazolini $0,05 \quad$ Take: Dragée of diazolin 0,05
Da tales doses numero $20 \quad$ Give such a dose in the amount 20 Signa: Write on the label:

## § 91. THE PRESCRIPTION OF OPHTHALMIC FILMS

Ophthalmic films are absorbable gelatin films containing drug substances. They are used instead of ophthalmic drops when keeping such a film under the eyelid at night.

The ophthalmic films are usually prescribed with the preposition "cum". The prescription regulations for the ophthalmic films are the following. The verb Recĭpe is followed by the Accusative plural forms lamellas (or membranulas) ophthalmicas, the drug name in the Genitive, the preposition "cum" with the active pharmaceutical component and the form numerro with a figure. In the second and third lines the standard phrases Da (Dentur) tales doses numero $\ldots$ and Signa (Signetur) are written:

Recĭpe: Lamellas ophthalmicas cum Novocaino numero 8 Da. Signa:
Take: Ophthalmic films with Novocain number 8
Give. Write on the label:

## § 92. THE PRESCRIPTION OF MEDICAL SPONGES

A pharmaceutical sponge is a porous substance saturated with a drug. It is applied to the necessary place and has antiseptic, haemostatic and other pharmaceutical effects. Pharmaceutical sponges are usually prescribed in plural form and in two variants.

1. The verb Recipe is followed by the Accusative plural form Spongias, the drug name in quotation marks (inverted commas) and the "numero" with a figure. The second and the third lines contain the standard phrases Da (Dentur) and Signa (Signetur):

Recĭpe: Spongias "Methuracōlum" numěro 10
Da
Signa:
Recĭpe: Sponges of meturacol number 10
Give
Write on the label:
2. Recipe is followed by the Accusative plural forms Spongias and an adjective, the preposition "with", the drug name and the form "numero" with a figure. After that the standard forms Da (Detur) and Signa (Signetur) follow:

Recǐpe: Spongias antiseptǐcas cum Kanamycino numero 5 Detur. Signetur:
Take: Antiseptic sponges with kanamycin number 5
Let it be given
Let it be labelled:

## § 93. THE PRESCRIPTION OF SUPPOSITORIES IN THE ACCUSATIVE CASE

A pharmaceutical suppository is a drug in the form of a round or conical tablet which is solid at room temperature and semisolid at body temperature. They distinguish the rectal suppository and the vaginal one. In the Accusative case, suppositories are prescribed as medical sponges:

1. Recipe is followed by the Accusative plural form Suppositoria with the adjective vaginalia (rectalia) or without these adjectives, the drug name in inverted commas and the numero with a figure. The second and the third lines contain the standard phrases Da (Dentur) and Signa (Signetur):

Recĭpe: Suppositoria vaginalia "Osarbonum" numěro 10
Da. Signa:
Take: Vaginal suppositories of osarbon number 10
Give. Write on the label:
2. Recipe is followed by the Accusative plural form Suppositoria, the preposition "cum" and the active pharmaceutical component in the Ablative, a figure indicating the amount of this component, the form "numero" with a figure. After that the standard forms Da (Detur) and Signa (Signetur) follow in the next lines:

Recĭpe: Suppositoria cum Diprophyllīno 0,5 numěro 30
Detur. Signetur:
Take: Suppositories with diprophylline 0,5 number 30
Let it be given. Let it be labelled:

## § 94. The prescription of aerosols in the Accusative case

An aerosol contains the drug in a gaseous form which is contained in a small cylinder provided with a valve.

Aerosols are prescribed in the Accusative singular form in two ways:

1. Recipe is followed by the Accusative singular form Aërosolum, its name in inverted commas and the numero with a figure. After that the standard forms Da (Detur) and Signa (Signetur) follow in the next lines:

Recĭpe: Aërosolum "Proposōlum" numero 2
Da
Signa:

Take: Aerosol of proposol number 2
Give.
Write on the label:
2. Recipe is followed by the Accusative singular form Aërosolum and its name in inverted commas or quotation marks. In the second line, the standard phrase Da (Dentur) tales doses numero is written:

Recĭpe: Aërosolum "Proposōlum" Da tales doses numero 2 Signa:

Take: Aerosol of proposol
Give such a dose in
the amount 2
Write on the label:
§ 95. MORPHOLOGICAL ROOTS

| Morphological roots | Meaning | Latin examples | English equivalents |
| :---: | :---: | :---: | :---: |
| -aesthes-, -aesth--asthes--esthes- | correction of sensibility | Anaesthesīnum, in <br> Aesthocīnum, in <br> Bellasthesīnum, in <br> Pavesthesīnum, in | anaesthesin aesthocin bellasthesin pavesthesin |
| -cain- | anesthetic effect | Novocaīnum, in Ultracaīnum, in | novocain ultracain |
| -camph- | influence on the central and peripheral nervous system | Bromcamphǒra, ae f Camphōnium, in | bromcamphora camphonium |
| -erythr-, -eryth-, -ery- | 1) containing erythromycin <br> 2) produced from erythrocytes | Erythromycīnum, in <br> Eryhaemum, in <br> Erycyclīnum, in | erythromycīn eryhaem erycyclin |
| -haem- | haemostatic or haematopoiesis stimulating effect | haemostaticcus, a, um Haemostimulīnum, in | haemostatic haemostimulin |
| -oestr- | female genital hormones | Oestradiōlum, in Synoestrōlum, in | oestradiol <br> synoestrol |
| -test- | male genital hormones | Medrotestrōnum, in Testosterōnum, in | medrotestron testosteron |
| -thym- | immunity stimulators produced from thymus | Thymalīnum, in Thymoptīnum, in | thymalin thymoptin |
| -thyr | correction of thyroid function | Thyroidīnum, in Rifathyroīnum, in | thyroidin rifathyroin |

## § 96. EXERCISES

1. Give the dictionary form of each word, translate from Latin into English:

Ampullae cum pulvěre Rifathyroīni; Granŭla Erycyclīni in capsŭlis; Injectiōnes Thymalīni pro adultis; Lamellae ophthalmĭcae cum Dicaīno; Pulvis Dicaīni crystallisātus; Solutio Pyromecaīni pro infusionǐbus intravenōsis;

Spongia haemostatīca in vitro vitreo; Suppositoria "Anaesthesōlum"; Thyreoidīnum in tabulettis
2. Give the dictionary form of each word, translate from English into Latin:
anaesthesin for narcosis; camphoric spirit for triturating; eryhaem in vitreous phials; haemostatic plaster of feracryl; oily solution of synoestrol in the ampoules; testoenat for injections; tablets of pregoestrol; solution of thymogen for intranasal introduction
3. Give the dictionary form of the nouns and the adjectives, translate the medical prescriptions into Latin:

## 1. Take: Coated tablets of allochol for children number 25 Give.Write on the label:

3. Take: Thyreoidin 0,05

Let it be given of such a dose number 50 in tablets Let it be labelled:
5. Take: Erynit 0,1

Give such a dose in the amount 20 in tablets Write on the label:
7. Take: Vaginal suppositories with synthomycin 0,15 number 10 Give. Write on the label:
9. Take: Haemostatic collagen sponge Let it be given of such a dose number 4 in plastic packets Let it be labelled:
2. Take: Capsules of oestradiol 0,14 number 12
Give. Write on the label:
4. Take: Solution of haemophobin 5 ml Give such a dose in the amount 10 in ampoules Write on the label:
6. Take: Ophthalmic films with neomycin number 8
Let it be given
Let it be labelled:
8. Take: Aerosol of camphomen Give such a dose in the amount 2 Write on the label:
10. Take: Anaestesin 2,5 Cocoa oil in sufficient amount to make a rectal suppository Let it be given of such a dose number 50 in tablets Let it be labelled:

## §97. Vocabulary to lesson 16

## Latin-English vocabulary

adultus, a, um - adult
ampulla, ae f - ampoule
"Anaesthesōlum" (Anaesthesōlum, i n) - anaesthesol capsŭla, ae f - capsule
crystallisātus, a, um - crystal

Dicaīnum, in - dicain
Erycyclīnum, in-erycyclin granŭlum, in - granule haemostaticcus, a um - haemostatic infusio, ōnis f - infusion intravenōsus, a, um - intravenous
lamella, ae f - film (ophthalmic)
Oestradiōlum, in - oestradiol
ophthalmicus, a, um - ophthalmic
Pyromecaīnum, in - pyromecain pulvis, ĕris $m$ - powder
Rifathyroīnum, in -rifathyroin
spongia, ae f - sponge
Thymalīnum, in - thymalin
Thyreoidīnum, in - thyreoidin vitrum, in - phial, glass
vitreus, a, um - vitreous

## English-Latin vocabulary

aerosol - aërosōlum, in
ampoule - ampulla, ae f
anaesthesin - Anaesthesinum, in
camphomen - "Camphomēnum" (Camphomēnum, i n)
camphoric - camphorātus, a, um
collagen - collagenĭcus, a, um
eryhaem - Eryhaemum, in
erynit - Erynitum, in
erythromycin - Erythromycīnum, in
feracryl - "Feracrylum" (Feracrylum, i n)
glass - 1 ) vitrum, in; 2) vitreus, a, um
haemophobin - Haemophobīnum, in
haemostatic - haemostatĭcus, a, um
in sufficient amount - quantum satis
intranasal - intranasālis, e
introduction - inductio, ōnis f
neomycin - Neomycīnum, in
oily - oleōsus, a, um
packet - fascicŭlus, i m
phial - vitrum, in
plaster - emplasrum, in
plastic - polyaethylenǐcus, a, um
pregoestrol - Praegoestrōlum, in
sponge - spongia, ae f
synthomycin - Synthomycīnum, in
spirit (alcohol) - spiritus, us $m$
synoestrol - Synoestrōlum, in
testoenat - Testoenātum, in
trituration - trituratio, ōnis f
thymogen - Thymogĕnum, in
vaginal - vaginālis, e

## Lesson 17 <br> LATIN NAMES OF CHEMICAL ELEMENTS, ACIDS, OXIDES, HYDROXIDES, PEROXIDES

## § 98. Latin names of Chemical elements

Latin names of chemical elements are, as a rule, nouns of the second declension and of the neuter gender beginning always with a capital letter:

Aluminium, in - aluminium
Ferrum, in - iron
Zincum, in - zinc
Nouns of two chemical elements are exception from this rule:
Phosphŏrus, i m - phosphorus
Sulfur, ŭris n - sulphur (in American English the spelling is sulfur)
Some elements have double names:
fluorine - Fluōrum, in = Phthorum, in
magnesium - Magnium, in = Magnesium, in
See the chemical element names of most common usage in the table below:

| Latin chemical symbols | Latin names | English names |
| :---: | :---: | :---: |
| Al | Aluminium | aluminium |
| Ag | Argentum | silver |
| As | Arsenĭcum | arsenic |
| Au | Aurum | gold |
| Ba | Barium | barium |
| Bi | Bismŭthum | bismuth |
| Br | Bromum | bromine |
| Ca | Calcium | calcium |
| C | Carboneum | carbon |
| Cl | Chlorum | chlorine |
| Cu | Cuprum | copper |
| Fe | Ferrum | iron |
| F | Fluōrum seu Phthorum | fluorine |
| Hg | Hydrargy̆rum | mercury |
| H | Hydrogenium | hydrogen |
| I | Iōdum | iodine |
| K | Kalium | potassium |


| Latin chemical symbols | Latin names | English names |
| :---: | :---: | :---: |
| Li | Lithium | lithium |
| Mg | Magnium seu Magnesium | magnesium |
| Mn | Mangănum | manganese |
| Na | Natrium | sodium |
| N | Nitrogenium | nitrogen |
| O | Oxygenium | oxygen |
| Pb | Plumbum | lead |
| P | Phosphŏrus | phosphorus |
| Sl | Silicium | silicon |
| S | Sulfur | sulphur (sulfur) |
| Zn | Zincum | zinc |

## § 99. LATIN NAMES OF ACIDS

Every Latin acid name consists of the noun acǐdum (acid) and an adjective of the first group with the ending -um in accordance with the rules of grammar agreement. One should, hereby, pay attention, that in the dictionary form, both nouns and adjective are written with a small letter but in the combination with adjectives the noun acĭdum is written with a capital letter:
ač̌dum, in - acid
borǐcus, a, um - boric
but: Acĭdum borǐcum
There are three variants of Latin acid names. The first two variants cover the names of acids which include oxygen, the last one - the names of acids without oxygen.

In the first variant, when an acid contains the greatest amount of oxygen, the suffix -ic- and the ending -um are added to the stem of a chemical element. English equivalents of these Latin adjectives have the suffix -ic as a final element:

| Latin noun <br> of chemical <br> element | The stem | Latin adjective <br> indicating the acid | The full Latin name <br> of the acid | The full <br> English name <br> of the acid |
| :---: | :---: | :---: | :---: | :---: |
| Sulfur, ǔris n | sulfur- | sulfuricus, a, um | Acǐdum sulfurǐcum <br> $\left(\mathrm{H}_{2} \mathrm{SO}_{4}\right)$ | sulphuric acid |

The same way of acid names building is used when names of organic acids are formed:

| Latin noun | The stem | Latin adjective <br> indicating the acid | The full Latin <br> name of the acid | The full English <br> name of the acid |
| :---: | :---: | :---: | :---: | :---: |
| lac, lactis $n$ <br> (milk) | lact- | lactǐcus, a, um | Ač̌dum lactǐcum | lactic acid |

In the second variant when the acid of the same element contains lesser amount of oxygen, the suffix -os- is used. In this case English equivalents have the ending -ous:

| Latin noun | The stem | Latin adjective <br> indicating the acid | The full Latin <br> name of the acid | The full English <br> name of the acid |
| :---: | :---: | :---: | :---: | :---: |
| Sulfur, ǔris <br> n | sulfur- | sulfurōsus, a, um | Acǐdum sulfurōsum <br> $\left(\mathrm{H}_{2} \mathrm{SO}_{3}\right)$ | sulphurous acid |

In the third variant, when an acid doesn't contain oxygen, the prefix hydroand the suffix -ic- are added to the stem:

| Latin noun | The stem | Latin adjective <br> indicating the acid | The full Latin <br> name of the acid | The full English <br> name of the acid |
| :---: | :---: | :---: | :---: | :---: |
| Sulfur, ǔris $n$ | sulfur- | hydrosulfurǐcus, <br> a, um | Ač̌dum <br> sulfurōsum $\left(\mathrm{H}_{2} \mathrm{~S}\right)$ | hydrosulphuric <br> acid |

One should remember that in acid names (as well as in salt names) formed from the noun Nitrogenium only a part of the stem is used: -nitr:

Acǐdum nitrǐcum - nitric acid Acǐdum nitrōsum - nitrous acid

## § 100. LATIN NAMES OF OXIDES, HYDROXIDES, PEROXIDES

Latin names of oxides, hydroxides, peroxides consist of two words. The first one is always the Genitive form of a chemical element, then the Nominative form oxy̆dum (hydroxy̆dum, peroxy̆dum) follows:

Zinci oxy̆dum - zinc oxide
Aluminii hydroxy̆dum - aluminium hydroxide
Hydrogenii peroxy̆dum - hydrogen peroxide
The names oxy̆dum, hydroxy̆dum, peroxy̆dum are nouns of the neutral gender of the second declension:
oxy̆dum, in
hydroxy̌dum, in
peroxy̆dum, in
§ 101. MORPHOLOGICAL ROOTS REFLECTING
CHEMICAL INFORMATION

| Morphological roots | Meaning | Latin examples | English equivalents |
| :---: | :---: | :---: | :---: |
| -(a)z-, |  | Azaleptīnum, in | azaleptin |
| -(a)zid-, | presence of nitrogen | Phthivazīdum, in | phthivazid |
| -(a)zin-, | in the heterocyclic | Sulfapyridazīnum, in | sulfapyridazin |
| -(a)zol-, | compounds | Norsulfazōlum, in | norsulfazol |
| -(a)zon- |  |  |  |
| -benz- | presence of benzene ring | $\begin{aligned} & \text { Benzohexonium, in } \\ & \text { benzoĭcus, a, um } \end{aligned}$ | benzohexon benzoic |


| Morphological roots | Meaning | Latin examples | English equivalents |
| :---: | :---: | :---: | :---: |
| -cyan- | cyanic acid, its anions or a cyan group | Cyanocobalamīnum, in cyanĭdum, in | cyanocobalamine cyanide |
| -hydr-, -hyd- | presence of hydrogen, water or a hydroxyl group | Hydrogenium, in Formaldehy̆dum, in | hydrogen formaldehyde |
| -naphth- | products of petroleum | Naphthalānum, in <br> Naphthyzīnum, in | naphthalan naphthyzin |
| -oxy- | presence of oxygen and its compounds | Chinoxydīnum, I n Oxylidīnum, in | chinoxydin oxylidin |
| -phtha(l)- | derivatives of phthalic acid | Phthalazōlum, in Phthazōlum, in | phthalazol phthazol |
| -phthor- | presence of fluorine compounds | Phthorocortum, in Phthoracizīnum, in | phthoracizin phthorocort |
| -sulf- | presence of sulphur or its derivatives | Norsulfazōlum, in sulfas, ātis m | norsulphazol sulphate |
| -thi- | presence of sulphur atom in the names of thiosalts and thioacids | Thiopentālum, in thiosulfas, ātis m | thiopental thiosulphate |
| -yl- | presence of carbohydrogenic radicals | Benzylpenicillīnum, in salicylǐcus, a, um | benzylpenicillin salicylic |

## § 102. ExERCISES

1. Give the dictionary form of each word and translate into English:

Acǐdum arsenicōsum anhydrǐcum; Acĭdum ascorbinĭcum in dragées; Cyanocobalamīnum seu Vitamīnum B12; Emplastrum Plumbi simplex; Emulsum Erythrophosphatīdi in ampullis; Phthalazōlum in tabulettis; Pulvis Magnesii oxy̌di; Sirūpus Aloës cum Ferro; Sulfacylum solubǐle pro injectionǐbus; Suspensio Hydrocortisōni in flaconǐbus; Tabulettae Acĭdi folǐci; Tabulettae Acǐdi acetysalicylǐci enterosolubǐles
2. Give the dictionary form of each word and translate into Latin:
ascorbic acid in drops; coated tablets of glutaminic acid; clear hydrochloric acid; diluted solution of hydrogen hydroxide; emulsion of castor oil; granules of furazolidon for children; powder of foxglove leaves; solution of nicotinic acid; solution of soluthizon for intratracheal injection; spirituous solution of iodine for internal use; suspension of aluminium hydroxide; tablets of lipoic acid; thioacetazon in tablets; white powder of sulphadimidine; yellow mercury oxide
3. Give the dictionary form both of the nouns and the adjectives, translate the medical prescriptions:

1. Take: Tablets of phthalazol 0,05 number 20
Give. Write on the label:
2. Take: Naphthalan ointment 50,0

Let it be given
Let it be labelled:

| 3. Take: Clear hydrochloric acid 6,0 | 4. Take: Purified sulphur |
| :---: | :---: |
| Distilled water up to 100 ml | Peach oil of each 30,0 |
| Let it be mixed | Let it be mixed |
| Let it be given | Let it be sterilized! |
| Let it be labelled: | Let it be given |
|  | Let it be labelled: |
| 5. Take: Streptocide | 6. Take: Glutaminic acid 1,5 |
| Sulphadimezin | Solution of glucose 25 \% - |
| Norsulphazol of each 5,0 | 450 ml |
| Mix to make the finest | Mix |
| powder | Give |
| Let it be given | Write on the label: |
| Let it be labelled: |  |
| 7. Take: Menthol 0,1 | 8. Take: Boric acid 5,0 |
| Zinc oxide | Zinc oxide |
| Boric acid of each 0,5 | Wheat starch of each 25,0 |
| Vaseline 10,0 | Ointment of naphthalan 45,0 |
| Mix to make an ointment | Mix to make a paste |
| Give | Give. |
| Write on the label: | Write on the label: |
| 9. Take: Ascorbic acid 0,2 | 10. Take: Yellow hydrogen oxide 0,6 |
| Nicotinic acid | Ichthyol 0,8 |
| Riboflavin of each 0,25 | Zinc ointment 20,0 |
| Distilled water up to 100 ml | Mix to make a paste |
| Let it be mixed | Give |
| Let it be given | Write on the label: |
| Let it be labelled: |  |
| 11. Take: Extract of belladonna 0,015 | 12. Take: Salicylic acid |
| Powder of rhubarb root | Lactic acid of each 6,0 |
| Magnesium oxide of each | Icy acetic acid 3,0 |
| 0,3 | Collodium up to 20,0 |
| Mix to make a powder | Mix |
| Give such a dose in the | Give |
| amount 10 | Write on the label: |
| Write on the label: |  |

§ 103. VocAbulary to lesson 17
Latin-English vocabulary
acetylsalicylĭcus, a, um - acetylsalicylic
acǐdum, in - acid

Aloë, ës f - aloe
anhydrǐcus, a, um - anhydrous
arsenicōsus, a, um - arsenous
ascorbinǐcus, a, um - ascorbic
Cyanocobalamīnum, in - cyanocobalamin
depurātus, a, um - purified
dragées - drops
emplastrum, in - plaster
emulsum, in - emulsion
enterosolubǐlis, e - enteric soluble
Erythrophosphatīdum, in - erythrophosphatide
Ferrum, in -iron
flaco, ōnis m - phial
folǐcus, a, um - folic
Hydrocortisōnum, in - hydrocortisone
Magnesium, in - magnesium
Naphthalānum, in - naphthalan
Norsulfazōlum, i n - norsulphazol
oxy̆dum, in - oxide
Phthalazōlum, in - phthalazol
Plumbum, in - lead
Riboflavīnum, in - riboflavin
Ricĭnus, i m - castor-oil plant
seu - or
simplex, ǐcis - simple
solubĭlis, e - soluble
Streptocīdum, in - streptocide
Sulfacylum, in - sulfacyl
Sulfur, ŭris n - sulphur
suspensio, ōnis f - suspension
vitamīnum, in — vitamīn

## English-Latin vocabulary

acetic - acetǐcus, a, um
acid - acǐdum, in
aluminium - Aluminium, in
ascorbic - ascorbinǐcus, a, um
boric - borĭcus, a, um
castor oil - oleum Rič̌ni
castor oil plant - Ricĭnus, i m
clear - purus, a, um
coated - obductus, a, um
collodium - Collodium, in
diluted - dilūtus, a, um
distilled - destillātus, a, um
drops - dragées
emulsion - emulsum, in
finest - subtilissimus, a, um
foxglove - Digitālis, is f
furazolidon - Furazolidōnum, in
glutaminic - glutaminǐcus, a, um
hydrochloric - hydrochlorǐcus, a, um
hydrogen - Hydrogenium, in
hydroxide - hydroxy̆dum, in
icy - glaciālis, e
ichthyol - Ichthyōlum, in
intratracheal - intratracheālis, e
iodine - Iōdum, in
lactic - lactǐcus, a, um
lipoic - lipoǐcus, a, um
mercury - Hydrargy̆rum, in
naphthalan - Naphthalānum, in
nicotinic - nicotinĭcus, a, um
oxide - oxy̆dum, in
paste - pasta, ae f
peach - Persiccum, in
phthalazol - Phthalazōlum, in
peach oil - Oleum Persicōrum
rhubarb - Rheum, in
riboflavin - Riboflavīnum, in
root - radix, īcis f
salicylic - salicylǐcus, a, um
soluthizon - Soluthizōnum, in
spirituous - spirituōsus, a, um
starch - Amy̆lum, in
sulphadimezin - Sulfadimezīnum, i n
sulphadimidine - Sulfadimidīnum, in
thioacetazone - Thioacetazonum, in
vaseline - Vaselīnum, in
up to - ad
water - aqua, ae f
wheat - Triticcum, in
yellow - flavus, a, um

## Lesson 18

## LATIN NAMES OF SALTS ON THE LABELS OF DRUG NAMES AND IN MEDICAL PRESCRIPTIONS

## § 104. LATIN NAMES OF SALTS, WHOSE ANIONS CONTAIN OXYGEN

Latin names of salts consist of two parts. First goes the Genitive case of a cation (a chemical element name or, more seldom, a drug name), in the second place is the Nominative of an anion. Anion names are always written with a small letter. If we speak of anions derivatives of acids containing oxygen of different degrees, two variants of these anions are distinguished:

1. Names of anions containing the greatest amount of oxygen are masculine nouns of the third declension with the endings -as in the Nominative and -ātis in the Genitive singular: $\mathrm{Na}_{2} \mathrm{SO}_{4}$ - Natrii sulfas $\rightarrow$ sulfas, ātis m:

| Chemical <br> symbol <br> of the salt | Latin name <br> of the salt | The anion and its <br> dictionary form | English equivalent <br> of the anion name | English equivalent <br> of the salt name |
| :---: | :---: | :---: | :---: | :---: |
| $\mathrm{Na}_{2} \mathrm{SO}_{4}$ | Natrii sulfas | sulfas, ātis m | sulphate | sodium sulphate |
| $\mathrm{NaNO}_{3}$ | Natrii nitras | nitras, ātis m | nitrate | sodium nitrate |

So, one can very easily find out the correlation between English and Latin anion names of the first group: the English ending -ate corresponds to the Latin ending -as. In this way we may instantly determine Latin equivalents of English anions without analyzing their chemical composition, including all the anions of organic acids having the ending -ate too:
sodium salicylate - Natrii salicylas
testosterone propionate - Testosterōni propionas
2. The names of anions containing lesser amount of oxygen are masculine nouns of the third declension with the endings -is in the Nominative and -itis in the Genitive singular: $\mathrm{Na}_{2} \mathrm{SO}_{3}$ - Natrii sulfis $\rightarrow$ sulfis, ītis m:

| Chemical <br> symbol <br> of the salt | Latin name <br> of the salt | The anion and its <br> dictionary form | English <br> equivalent <br> of the anion name | English <br> equivalent <br> of the salt name |
| :---: | :---: | :---: | :---: | :---: |
| $\mathrm{Na}_{2} \mathrm{SO}_{3}$ | Natrii sulfis | sulfis, îtis m | sulphite | sodium sulphite |
| $\mathrm{NaNO}_{2}$ | Natrii nitris | nitris, ītis m | nitrite | sodium nitrite |

As you can see, the Latin anion ending -is corresponds to the English anion ending -ite, and it allows, as it is seen above, to determine any necessary equivalent taking as well into consideration the spelling of each separate word.

## § 105. LATIN NAMES OF SALTS WHOSE ANIONS DO NOT CONTAIN OXYGEN

The names of anions which don't contain oxygen are neutral nouns of the second declension with the suffix -id- and the ending -um:

| Chemical <br> symbol <br> of the salt | Latin name <br> of the salt | The anion and its <br> dictionary form | English equivalent <br> of the anion name | English equivalent <br> of the salt name |
| :---: | :---: | :---: | :---: | :---: |
| $\mathrm{Na}_{2} \mathrm{~S}$ | Natrii sulfǐdum | sulfidum, i n | sulphide | sodium sulphide |
| NaCl | Natrii chloř̌dum | chlorǐdum, in | chloride | sodium chloride |

So, the complex ending -idum of the Latin anions which don't contain oxygen corresponds to the English ending -ide in the anions with the similar chemical compound.

Conclusion: if you remember the endings of the three seen above variants of Latin anions and if you know which Latin anion ending corresponds to the English one, you do not need to know the chemical compound of any salt to express correctly both English and Latin salt name.

## § 106. ANION NAMES OF BASIC SALTS

Latin anion names of basic salts are formed by adding the prefix sub-:
Bismŭthi subnitras - basic nitrate of bismuth
Aluminii subacētas - basic acetate of aluminium

## § 107. Two-COMPONENT NAMES OF POTASSIUM AND SODIUM SALTS

Two-component Latin names of potassium and sodium salts are written with a hyphen. Each component of such a name is a neutral noun of the second declension. The second component following the hyphen is written with a small letter. In the dictionary form, after the two-component Nominative cases the ending -i and the gender sign $\mathbf{n}$ follow. English equivalents of these terms are written without a hyphen:

Sulfacylum-natrium, in - sulphacyl sodium
Benzylpenicillīnum- kalium, in - benzylpenicillin potassium
§ 108. MORPHOLOGICAL ROOTS REFLECTING PHARMACEUTICAL
INFORMATION

| Morphological roots | Meaning | Latin examples | English equivalents |
| :---: | :---: | :---: | :---: |
| -aeth- | presence of ethyl group | aethylǐcus, a, um Aethynālum, in | ethylic etynal |
| -lysin-, <br> -lytin- | removing some destructive factor | Phytolysīnum, in Broncholytīnum, in | phytolysin broncholytin |
| -meth- | presence of methyl group | Methylēnum, in Methylium, in | methylen methyl |
| -morph- | analgetics, derivatives of morphine | Apomorphīnum, in Morpholongum, in | apomorphin morpholong |
| -phen- | presence of phenyl group | Phenōlum, in Phthorophenazīnum, in | phenol phthorophenazin |


| Morphological <br> roots | Meaning | Latin examples | English <br> equivalents |
| :---: | :---: | :---: | :---: |
| -phthi- | antitubercular effect | Phthivazīdum, in <br> Phthizopyrāmum, in | ftivazide <br> phthizopyram |
| -poly- | large number, multitude | polyvitaminōsus, a, um <br> Polyamīnum, in | multivitaminous <br> polyamin |
| -thromb- | thrombolytics, against <br> thrombosis | Thromb̄̄num, in <br> Thrombocytīnim, in | thrombin <br> thrombocytin |

## § 109. ExERCISES

1. Give the dictionary form of each word, translate from Latin into English:

Aether stabilisātus pro narcosi; Barii sulfas pro rentgeno; Cerebrolysīnum in ampullis ad usum parenterālem; Emulsum Benzylii benzoātis medicinālis; Granŭla Aethazōli-natrii pro infantĭbus; Membranŭlae ophthalmĭcae cum Atropīni sulfāte; Methylēnum coeruleum in capsŭlis; Phenylii salicylas in tabulettis; Pulvis Phenoxymethylpenicillīni pro suspensiōne; Solutio Aethacridīni lactātis spirituōsa; Species polyvitaminōsae et pectorāles; Tabulettae Calcii orotātis; Theobrominum-natrium cum Natrii salicylāte; Spirĭtus aethylĭcus rectificātus; Vitamīnum $\mathrm{B}_{6}$ seu Pyridoxini hydrochlorĭdum
2. Give the dictionary form of each word, translate from English into Latin:
basic acetate of lead; basic nitrate of bismuth with belladonna extract; coated tablets of tetracycline hydrochloride; hypertonic solution of sodium chloride; isotonic solution of sodium chloride; morpholong for intramuscular injections; ointment of copper citrate; ophthalmic films with fibrinolysin; polyethylenoxide for intravenous use; powder of sarcolysin for solution; precipitated calcium carbonate; rectified ethylic spirit; solution of terrilytin for inhalation; suppositories of methyluracil; syrup of broncholytin in phials; tablets of ethylmorphine hydrochloride for adults; tablets of phthivazid
3. Give the dictionary form of both nouns and adjectives; translate the medical prescriptions:

1. Take: Tincture of spring pheasant's eye herb 180 m Amidopyrin 2,0
Sodium bromide 4,0
Codeine phosphate 0,2
Mix
Give
Write on the label:
2. Take: Extract of belladonna 0,001

Basic bismuth nitrate
Phenyl salicylate of each 0,25
Mix to make a powder
Give such a dose in the amount 10
Write on the label:
3. Take: Ethylmorphine hydrochloride

0,1
Vaseline 10,0
Mix to make an ointment
Give
Write on the label:
5. Take: Platyphylline hydrotartrate 0,005
Phenobarbital
Papaverin hydrochloride of each 0,02
Give such a dose in the amount 10
Write on the label:
7. Take: Coated tablets of
oleandoandomycin
phosphate 0,125 number 25
Let it be given
Let it be labelled:
9. Take: Morphine hydrochloride 0,015

Apomorphine hydrochloride 0,05
Diluted hydrochloric acid 1 ml
Distilled water up to 2000 ml Let it be mixed
Let it be given
Let it be labelled:

## 11. Take: Menthol

Ethylmorphine hydrochloride of each 200 ml
Sugar 0,03
Mix to make a powder
Give such a dose in amount
10
Write on the label:
4. Take: Rectified ethyl spirit $95 \%$ 20 ml
Water for injections 100 ml
Let it be mixed
Let it be given
Let it be labelled:
6. Take: Dimedrol 0,01

Ephedrin hydrochloride 0,1
Peach oil 10 ml
Mint oil I drop
Mix
Give
Write on the label:
8. Take: Ophthalmic films with neomycin sulphate number 10
Let it be given
Let it be labelled:
10. Take: Magnesium carbonate 4,0

Potassium carbonate 5,0
Sodium hydrocarbonate 1,0
Glycerin in sufficient amount
Mix to make a paste
Give
Write on the label:
12. Take: Tincture of althea root 180 ml
Sodium hydrocarbonate Sodium benzoate of each 5,0
Simple syrup 20,0
Mix
Give
Write on the label:

## § 110. VocABULARY TO LESSON 18

## Latin-English vocabulary

Aethacridīnum, in - ethacridine
aethylĭcus, a, um - ethyl
aether, ěris $m$ - ether
Aethazōlum-natrium, in - ethazol sodium
Althaea, ae f - althea
Apomorphinum, in-apomorphine
Atropīnum, i n - atropin
benzoas, ātis $m$ - benzoate
Benzylium, i n - benzyl
Calcium, in-calcium
Cerebrolysīnum, i n - cerebrolysin
coeruleus, a, um - blue
hydrochlorĭdum, i n - hydrochloride
lactas, ātis m - lactate
medicinālis, e - medical
Methylēnum, in - methylen
orōtas, ātis m - orotate
parenterālis, e - parenteral
pectorālis, e-pectoral
Phenoxymethylpenicillīnum, i n - phenoxymethylpenicillin
Phenylīnum, in - phenyl
polyvitaminōsus, a, um - polyvitaminous
Pyridoxīnum in - pyridoxine
rentgēnum, i n — roentgenoscopy
salicylas, ātis m - salicylate
sulfas, ātis m - sulphate
Natrium, in - sodium
spirituōsus, a, um - spirituous
spirǐtus, us $m$ - spirit
suspensio, ōnis f - suspension
Theobrominum-natrium, in - theobromine sodium
vernālis, e - existing in spring
vitamīnum, in - vitamin

## English-Latin vocabulary

amidopyrin - Amidopyrīnum, in
apomorphine - Apomorphīnum, in
basic acetate - subacētas, ātis m
basic nitrate - subnĭtras, ātis m
belladonna - Belladonna, ae f
benzoate - benzoas, ātis $m$
bismuth - Bismŭthum, in
bromide - bromĭdum, in
broncholytin - Broncholytīnum, in
calcium - Calcium, in
carbonate - carbōnas, ātis m
chloride - chlorǐdum, in
citrate - citras, ātis m
codeine - Codeīnum, in
copper - Cuprum, in
diluted - dilūtus, a, um
dimedrol - Dimedrōlum, in
fibrinolysin - Fibrolysīnum, in
film - lamella, ae f; membranŭla, ae f
glycerin-Glycerīnum, in
hydrocarbonate - hydrocarbōnas, atis m
hydrochloride - hydrochlorǐdum, in
hypertonic - hypertonǐcus, a, um
inhalation - inhalatio, ōnis f
intramuscular - intramusculāris, e
intravenous - intravenōsus, a, um
isotonic - isotonǐcus, a, um
lead - Plumbum, in
magnesium - Magnesium, in
menthol - Menthōlum, in
morphine - Morphīnum, in
neomycin - Neomycīnum, in
papaverine - Papaverīnum, in
peach - Persicum, in
peach oil - Oleum Persicōrum
phenobarbital - Phenobarbitālum, in
phenyl - Phenylium, in
phosphate - phosphas, ātis m
phthivazid - Phthivazīdum, in
platyphylline - Platyphyllīnum, in
polyethylenoxide - Polyaethylenoxīdum, in
potassium - Kalium, in
precipitated - praecipitātus, a, um
salicylate - salicylas, ātis m
sarcolysin - Sarcolysīnum, in
sodium - Natrium, in
spring Adonis (=spring pheasant's eye) — Adōnis (ĩdis m, f) vernālis (is, e)
spirit - spirǐtus, us $m$
sugar - Sacchărum, in
syrup - sirūpus, i m
terrilytin - Terrilytīnum, in
vaseline - Vaselīnum, in

## § 111. Model (Sample) OF THE Final test IN PHARMACEUTICAL TERMINOLOGY

1. Write down the dictionary form of the Latin equivalents:
1) mercury; 2) basic acetate; 3) mint; 4) oxide; 5) rhubarb; 6) sugar; 7) sunflower; 8) glucose; 9) peach; 10) chloroform
2. Give the dictionary form of each word and translate into Latin:
1) decoction of oak bark; 2) powder of foxglove leaves; 3) dry extract of licorice; 4) camphoric spirit for trituration; 5) eryhaem in glass phials; 6) coated tablets of glutaminic acid; 7) emulsion of castor oil; 8) precipitated calcium carbonate
3. Write down the dictionary form of the nouns and adjectives and translate the following prescriptions into Latin:
4. Take: Ichthyol 3,0

Vaseline up to 30,0
Mix to make an ointment
Give
Write on the label:
3. Take: Ophthalmic films with neomycin number 8
Let it be given
Let it be labelled:
2. Take: Clear hydrochloric acid 6,0

Distilled water up to 100 ml
Let it be mixed
Let it be given
Let it be labelled:
4. Take: Tincture of althea root 180 ml

Sodium hydrocarbonate
Sodium benzoate of each 5,0
Simple sirup 20,0
Mix. Give.

Write on the label:

## LATIN-ENGLISH VOCABULARY

## A

acetylsalicylǐcus, a, um
acetylsalicylic
acidum, $\mathbf{i n}$ acid
ad (Acc.) for
ad usum externum to be taken externally (= for external use)
ad usum internum to be taken internally (= for internal use)
ad usum parenterālem to be taken parenterally (=for parenteral use)
adultus, a, um adult
Aethacridīnum, in ethacridine
Aethazōlum-natrium, in ethazol
sodium
aether, ĕris $m$ ether aethylĭcus, a, um ethylic
Aloë, ës f aloe
Althaea, ae $f$ althea
ampulla, ae $f$ ampoule
Anaesthesōlum, in anaesthesol
anhydrǐcus, a, um anhydrous
Apomorphīnum, in apomorphine arsenicōsus, a, um arsenous
ascorbinǐcus, a, um ascorbic
Aspirīnum, in aspirin
Atropīnum, in atropine

## B

Barium, in barium
benzoas, ātis $m$ benzoate
Benzylium, in benzyl

## C

Calcium, in calcium capsǔla, ae f capsule
Cerebrolysīnum, in cerebrolysin coeruleus, a, um blue Corglycōnum, in corglycon crystallisātus, a, um crystal
cum (Abl.) with
Cyanocobalamīnum, in
cyanocobalamin

## D

depurātus, a, um purified
Dibiomycīnum, in dibiomycine
Dicaīnum, in dicain
dragées drops

## E

emplastrum, in plaster
emulsum, in emulsion
enterosolubilis, $\mathbf{e}$ enteric soluble
Erycyclīnum, in erycycline
Erythrophosphatīdum, in
erythrophosphatide
et and
Eucalyptus, if eucalypt
Euphyllīnum, in euphylline ex (Abl.) from, of
extractum, in extract

## F

Ferrum, in iron
flaco, $\overline{0}$ nis $\mathbf{m}$ phial
fluĭdus, a um liquid
folǐcus, a, um folic
folium, in leaf
fructus, us m fruit

## G

Glucōsum, in glucose
Glycyramum, in glycyram
granŭlum, in granule

## H

haemostatǐcus, a, um haemostatic
Helianthus, i m sunflower
hydrochlorǐdum, i n hydrochloride
Hydrocortisōnum, in
hydrocortisone

## I

In (Abl.) in
infans, ntis m, $\mathbf{f}$ child
infusio, ōnis $\mathbf{f}$ infusion
injectio, ōnis $\mathbf{f}$ injection
intravenōsus, a, um intravenous

## L

lactas, $\bar{a}$ tis m lactate
lamella, ae f film (ophthalmic)
Leonūrus, i m motherwort
linimentum, i n liniment

## M

Magnesium, in magnesium medicinālis, e medical membranŭla, ae f film Methylēnum, i n methylene

## N

Naphthalānum, in naphthalan narcōsis, is $\mathbf{f}$ narcosis
Natrium, i n sodium
Norsulfazōlum, i n norsulphazol

## 0

obductus, a, um coated
Oestradiōlum, i n oestradiol
oleum, i n oil
ophthalmĭcus, a, um ophthalmic
orōtas, ātis m orotate
oxy̆dum, i n oxide

## P

parenterālis, e parenteral
pectorālis, e pectoral

Phenoxymethylpenicillīnum, in phenoxymethylpenicillin
Phenylium, in phenyl
Phthalazōlum, i n phthalazol
Phytīnum, i n phytin
Phytomenadiōnum, in
phytomenadion
Plumbum, in lead
polyvitaminōsus, a, um
polyvitaminous
pro (Abl.) for
pulvis, ěris $\mathbf{m}$ powder
Pyridoxīnum in pyridoxine
Pyromecaīnum, in pyromecain

## Q

quantum satis in sufficient amount Quercus, us foak

## R

radix, īcis $\mathbf{f}$ root
rectificātus, a, um rectified
rentgenum, in roentgenoscopy
rhizōma, ătis $n$ rhizome
Riboflavinum, i n riboflavin
Ricĭnus, i m castor oil plant
Rifathyroīnum, i n rifathyroin
Rosa, ae $\mathbf{f}$ dog rose, wild rose

## S

salicylas, ātis m salicylate
seu or
simplex, ǐcis simple
sirūpus, i m syrup
solubĭlis, e soluble
solutio, $\overline{\text { onis }} \mathbf{f}$ solution
species, ērum $f$ species
spirituōsus, a, um spirituous
spirǐtus, us m spirit
spongia, ae $f$ sponge
stabilisātus, a, um stabilized
Streptocīdum, i n streptocide

Sulfacylum, in sulfacyl
sulfas, ātis m sulphate
Sulfur, ŭris n sulphur
suppositorium, in suppository
suspensio, ōnis f suspension
Synthomycīnum, in synthomycine

## T

tabuletta, ae f tablet
Testosterōnum, in testosterone
Theobrominum-natrium, in
theobromine sodium
Theophedrīnum, in theophedrin
Theophyllīnum, in theophylline
Thymalīnum, in thymalin

Thyreoidīnum, in thyreoidin tinctūra, ae f tincture

## U

unguentum, in ointment usus, us $\mathbf{m}$ use

V
vaginālis, e vaginal
Valeriāna, ae f valerian
vernālis, e existing in spring
vitamīnum, in vitamin
vitreus, a, um vitreous
vitrum, in phial, glass

## ENGLISH-LATIN VOCABULARY

## A

acetic acetǐcus, a um
acid acĭdum, in
Adonis Adōnis, ǐdis m, f
Adonis vernalis(=sping pheasant's
eye) Adōnis (ĭdis m, f)
vernālis (is, e)
adult adultus, i m; adultus, a, um
aerosol aërosōlum, in
allochol Allochōlum, in
althea Althaea, ae f
aluminium Aluminium, in
amidopyrin Amidopyrīnum, in
ampoule ampulla, ae f
anaesthesin Anaesthesinum, in
antiasthmatǐc antiasthmatǐcus, a, um
antipyrin Antipyrīnum, in
apomorphine Apomorphīnum, in
ascorbic ascorbinĭcus, a, um

## B

bark cortex, ícis m
basic acetate subacētas, ātis m
basic nitrate subnitras, ātis m
belladonna Belladonna, ae f
benzoate benzoas, ātis $m$
bismuth Bismŭthum, in
boric borǐcus, a, um
bromide bromídum, in
broncholytin Broncholytīnum, in

## C

calcium Calcium, in
camphomen "Camphomēnum" (Camphomēnum, in)
camphoric camphorātus, a, um capsule capsŭla, ae f
carbonate carbōnas, ātis m
castor oil oleum Ricinni
children infantes, ium $m, f$
chloride chlorídum, in
chloroform Chloroformium, in
citrate citras, ātis m
clear purus, a, um
coated obductus, a, um
cocoa Cacāo (without a dictionary
form)
codeine Codeīnum, in
collagen collagenĭcus, a, um
collodium Collodium, in
compound composǐtus, a, um
copper Cuprum, in

## D

decoction decoctum, in
diluted dilūtus, a, um
dimedrol Dimedrōlum, in
distilled destillātus, $a$, um
drops dragées
dry siccus, a, um

## E

emulsion emulsum, in
ephatin Ephatīnum, in
eryhaem Eryhaemum, in
erynit Erynītum, in
erythromycin Erythromycinum, in
ether aether, ěris $m$
eucalyptus Eucalyptus, if
extract extractum, in

## F

feracryl "Feracrylum"
(Feracrylum, in)
fibrinolysin Fibrolysīnum, in
film lamella, ae $f$; membranŭla, ae $f$
finest subtilissǐmus, a, um
flax Linum, in
flower flos, floris m
for pro (Abl.); ad (Acc.) + usum
foxglove Digitālis, is $f$
furazolidone Furazolidōnum, in

## G

glass 1) vitrum, in; 2) vitreus, a, um
glucose Glucōsum, in
glutaminic glutaminĭcus, a, um
glyceric glycerinōsus, a, um
glycerin Glycerīnum, in
glycin Glycīnum, in
granule granŭlum, in

## H

haemophobin Haemophobīnum, in
haemostatic haemostatǐcus, a, um
hawthorn Crataegus, if
herb herba, ae f
hydrocarbonate hydrocarbōnas, ātis $m$
hydrochloric hydrochlorǐcus, a, um
hydrochloride hydrochlorǐdum, in
hydrogen Hydrogenium, in
hydrotartrate hydrotartras, ātis m
hydroxide hydroxy̆dum, in
hypertonic hypertonĭcus, a, um

## I

ichthyol Ichthyōlum, in
icy glaciālis, e
in in ( in pharmaceutical terms with Ablative )
inhalation inhalatio, ōnis $f$
injection injectio, ōnis $f$
in sufficient amount quantum satis
intramuscular intramusculāris, e
intranasal intranasālis, e
intratracheal intratracheālis, e
intravenous intravenōsus, a, um
introduction inductio, ōnis f
iodine Iōdum, in
isotonic isotonĭcus, a, um

## L

lactic lactǐcus, a, um
lead Plumbum, in
leaf folium, in
licorice Glycyrrhīza, ae f
lily of the valley Convallaria, ae $f$
liniment linimentum, in
lipoic lipoǐcus, a, um
liquid fluĭdus, a, um

## M

magnesium Magnesium, in matricary Chamomilla, ae f medicinal medicinālis, e menthol Menthōlum, in mercury Hydrargy̆rum, in methyluracil Methyluracīlum, in $\operatorname{mint}$ Mentha, ae f morphine Morphīnum, in morpholong Morpholongum, in mycoseptin Mycoseptīnum, in

## N

naphthalan Naphthalānum, in narcosis narcōsis, is f neomycin Neomycīnum, in nicotinic nicotinĭcus, a, um norsulphazol Norsulfazōlum, in nitroglycerin Nitroglycerīnum, in number numěrus, i m

## 0

oak Quercus, us f
oestradiol Oestradiōlum, in
oil oleum, in
oily oleōsus, a, um
ointment unguentun, in
oleandomycin Oleandomycīnum, in
ophthalmic ophthalmǐcus, a, um
oxide oxy̆dum, i n

## P

packet fascicǔlus, i m
papaverine Papaverīnum, in
paste pasta, ae f
peach Persicum, in
peach oil Oleum Persicōrum
pectoral pectorālis, e
pepper piperītus, a, um
phenobarbital Phenobarbitālum, in
phenyl Phenylium, in
phial vitrum, in
phosphate phosphas, ātis m
phthalazol Phthalazōlum, in
phthivazid Phthivazīdum, in
phytomenadion
Phytomenadiōnum, in
plaster emplastrum, in
plastic polyaethylenǐcus, a, um
platyphylline Platyphyllinĭnum, in
polyethylenoxid
Polyaethylenoxīdum, in
potassium Kalium. in
powder pulvis, ěris m precipitated praecipitātus, a, um praegoestrol Praegoestrolum, in purified (about solid substances)
purificātus, a um

## R

rectal rectālis, e
rectified (about liquid substances)
rectificātus, a, um
rhizome rhizōma, ătis n
rhubarb Rheum, in
riboflavin Riboflavīnum, in
root radix, īcis $f$

## S

salicylate salicylas, ātis m salicylic salicylĭcus, a, um sarcolysin Sarcolysīnum, in seed semen, ĭnis n
simple simplex, ǐcis
sodium Natrium, in
soluble solubǐlis, e
soluthizone Soluthizōnum, in
solution solutio, ōnis $f$
species species, èrum f (only plur.)
spirit (alcohol) spiritus, us $m$
spirituous spirituōsus, a, um
sponge spongia, ae f
spring vernālis, e
srophanthus Srophanthus, im
starch Amy̆lum, in
streptocide Streptocīdum, in
strophanthine Strophanthīnum, in
strophanthus Strophanthus, im
sublingual sublinguālis, e
such talis, e
sugar Sacchărum, in
sulphadimezine Sulfadimezīnum, in
sulphadimidine Sulfadimidīnum, in
sulphate sulfas, ātis m
sulphur sulfur, ŭris n
sunflower Helianthus, i m
synoestrol Synoestrōlum, in
synthomycin Synthomycīnum, in
suppository suppositorium, in suspension suspensio, ōnis $f$
syrup sirūpus, i m

## T

tablet tabuletta, ae f
tea thea, ae f
terrilytine Terrilytīnum, in
tetracycline Tetracyclīnum, in
testoenat Testoenātum, in
theophylline Theophyllīnum, in
thioacetazone Thioacetazōnum, in
thymogen Thymogĕnum, in
thyreoidin Thyreoidīnum, in
tincture tinctūra, ae f
trituration trituratio, ōnis f

## U

up to ad
use usus, us m

## V

vaginal vaginālis, e valerian Valeriāna, ae $f$ vaseline Vaselīnum, in vitreous vitreus, a, um

## W

water aqua, ae f
wheat Tritǐcum, in with cum (Abl.)

## Y

yellow flavus, a, um

## Z

zinc Zincum, in

# Part IV CLINICAL TERMINOLOGY 

## Lesson 19 <br> INTRODUCTION TO LATIN CLINICAL TERMINOLOGY. ONE-WORD TERMS AND THEIR MORPHOLOGICAL STRUCTURE. INITIAL AND FINAL MORPHOLOGICAL ELEMENTS USED FOR WORD BUILDING. NAMES OF BRANCHES OF MEDICINE AND MEDICAL SPECIALISTS. NAMES OF MEDICAL EXAMINATIONS

## § 112. GENERAL REMARKS ON LATIN CLINICAL TERMINOLOGY

Clinical names are the most numerous among all medical terms, as these names signify a huge amount of different diseases, pathological conditions and abnormalities, medical examinations and operations. This terminology also includes a great amount of paramedical vocabulary. It is estimated that about $50 \%$ of English medical terms are of Greek origin, but this relation is particularly evident in clinical terms.

The word clinical itself is of Greek origin (klinike means bed) and it is the acknowledgement of the important role of Greek physicians in both theoretical and practical medicine. Thanks to Greek physicians many diseases got their names and via Latin became a part of European medical languages. New clinical names coming into use were built, as a rule, on the basis of Greek vocabulary and Greek morphological elements. The grammar form of new clinical terms corresponds to the norms of Latin or some European languages. This historical tradition, in particular, is followed in English. For example:

| Latin | English | Meaning |
| :---: | :---: | :---: |
| adenītis | adenitis | inflammation of a gland |
| cardiopathia | cardiopathy | disease of the heart |
| osteōma | osteoma | tumour made up of bone tissue |

It is indisputable that clinical terms composed on the basis of Greek morphological elements have a very important advantage: they are short, but may stand for a large clinical definition. That is why they are the priority choice of the physicians all over the world, and everyone who has a M. D. must know the rules of word building of medical terms and learn lexical and morphological word building elements.

## § 113. THE MORPHOLOGICAL STRUCTURE OF ONE-WORD CLINICAL TERMS

From the point of view of their morphological structure, one-word clinical terms can be: 1) simple, containing only one stem; 2) compound, consisting of two or more morphological elements.

About $15 \%$ clinical names belong to the first group, e. g. asthma, ătis n asthma; cancer, cri m - cancer; herpes, ĕtis m - herpes; ulcus, ĕris n - ulcer. These noun-terms are mostly used in combination with adjectives or nouns: asthma bronchiāle - bronchial asthma; ulcus gastris - ulcer of the stomach.

The majority of one-word clinical terms consist of two or more morphological elements. These elements can be expressed by:
I. Greek affixes (prefixes, suffixes) and roots of nouns or adjectives. In this case, the name can contain:
I.1. A prefix, a root, a suffix and an ending (mostly -ia, -ēma, -ismus, -ītis, -ōma, -ōsis):
parametrītis, ǐdis $\mathbf{f}$ - parametritis (tissue inflammation near uterus). The name includes: a) the prefix para- (near); b) the root metr- (uterus); c) the suffix -itis (combination of suffix -it- and ending -is) with the constant meaning of "inflammation";
I.2. A prefix, one or more roots and an ending:
atrichia, ae $\mathbf{f}$ - atrichia (lack of hair). The name includes: a) the prefix a(absence, lack, cessation of a function) b) the root trich- (hair) c) the ending -ia;
hypermetropia, ae $\mathbf{f}$ - hypermetropia (long-sightedness). The name includes: a) the prefix hyper- (excessive function); b) the root -metr(measurement); c) the final root-opia (sight);
I.3. A root and a suffix (suffixed ending): chondrōma, ătis n chondroma (tumour of cartilaginous tissue). The name includes: a) the root chondr- (cartilage); b) the suffix - $\mathbf{o m a}$ with the meaning "tumour"(=tumor).
2. The initial and final word building roots in combination with the term endings -ia, -ēma, -ismus, -ītis, - $\overline{\mathbf{o}} \mathrm{ma}$, $-\overline{\mathrm{o} s i s}$, -us. If the initial word building root hereby ends up with a consonant and the final one begins with a consonant too, these roots are joined via a connecting vowel -o-:
rhinopathia, ae $\mathbf{f}$ - rhinopathy (disease of the nose). The name includes: 1) the root rhin- (nose); 2) the connecting vowel -0-; 3 ) the root path- (disease);
otorhinolaryngolŏgus, $\mathbf{i} \mathbf{m}$ - otorhinolaryngologist (the doctor for treating ear, nose and larynx diseases). The name includes: a) the root ot- (ear); b) the root rhin- (nose); c) the root laryng- (larynx); d) the final root -logus (a medical specialist).

If the first root ends with a vowel, the connecting -o- is usually omitted:
pelvimetria, ae $\mathbf{f}$ - pelvimetry (pelvis measurement);
tachycardia, ae f - tachycardia (abnormally fast heart rate).
If the second root begins with a vowel, the connecting -0- as a rule is omitted too:
haemat + uria $\rightarrow$ haematuria, ae $\mathbf{f}$ - hematuria (blood in the urine);
odont + algia $\rightarrow$ odontalgia, ae $\mathbf{f}$ - odontalgia (toothache, feeling of pain in the tooth).

Though there are some exceptions from this rule: e. g. the roots bronchoand bronchi- never lose their final vowels: bronchiectasia, ae f (=bronchoectasia) - bronchiectasis (expansion of the bronchi); bronchoadenitis, itĭdis $\mathbf{f}$ - bronchoadenitis (inflammation of lymphatic glands).The root bi- is always used with the connecting -o-: biocycle, biology, microbiology, biopharmaceutics.

## § 114. Some notes on the word stressing in clinical names

In the compound nouns with the ending -ia the last but one vowel " $i$ " is, as a rule, stressed contrary to the rule "vowel before vowel is short": atrichía, bronchiectasía, haematuría, hypermetropía, odontalgía, rhinopathía. The noun anatómia (anatomy) and nouns with the final element -logia keep the third syllable from the end stressed: cardiológia (cardiology), neurológia (neurology), physiológia (physiology).

## § 115. InITIAL AND FINAL ROOT ELEMENTS

Initial root elements are combined in a one-word term, as you could see above, with the final roots via the connecting vowel -o- or with the final suffixes. These roots are presented in the table of each lesson in the following consequence: 1) the Greek root; 2) its Latin equivalent in the dictionary form; 3) English meaning; 4) English clinical word element:

| ger-, geront- | senex, is m | 1) old man; 2) old age | ger-, geront- |
| :--- | :--- | :--- | :--- |

Initial roots can have two or more variants: ger-, geront- (old man or old age); haem-, haemat- (blood). All these variants are to be learnt by heart.

Final root elements are not as numerous as initial ones, but their word building capacity is very high. One should also remember that the final root or suffixed word building element comes first in the literal translation of the term, for example:

The term nephrographia, ae f consists of the initial root nephr- (kidney) and the final root -graphia (X-ray examination), so the literal translation is "X-ray examination of the kidneys", nephrography.

The term myōma, ătis $n$ consists of the initial root my- (muscle) and the final root -oma (tumour), so the literal translation is "tumour of muscular tissue", myoma.

Final root elements can be part of an adjective too, e. g.: -gěnus, a, um in the term biogĕnus, a, um - biogenic (caused by a living organism).

The final roots are presented at each lesson in the table like that:
-logus - a specialist in a brunch of science or medicine
-iāter - a doctor, specialist in a brunch of clinical medicine
Some roots may be both initial and final. Final roots have common endings, mostly the ending -ia. For example: the initial root ophthalm- and
the final root -ophthlmia have the same meaning "eye". In these cases, both roots are placed in the same cell of the table.

## § 116. NAMES OF THE MAIN BRANCHES OF CLINICAL MEDICINE

Names of the main branches of clinical medicine are usually formed by means of the final root element -logia and the appropriate initial one, which determines the cardinal sense of the term. It should be mentioned that the most numerous names of medico-biological sciences are built according to this rule:
ophthalm- (eye) + logia $\rightarrow$ ophthalmologia, ae $\mathrm{f}-$ ophthalmology, a branch of clinical medicine treating eye diseases;
proct- $($ rectum $)+\operatorname{logia} \rightarrow$ proctologia, ae $\mathrm{f}-$ proctology, a branch of clinical medicine treating rectum diseases. Compare as well:
immunologia, ae f - immunology, a science about immunity;
pharmacologia, ae f - pharmacology, a science about drugs and their usage;
physiologia, ae f - physiology, a science about normal vital processes in human organism.

Names of some branches of clinical medicine are built by adding the root -patho- (disease) and the final root -logia to the initial root:
neur- (nerve) + -patho- + logia $\rightarrow$ neuropathologia, ae f - neuropathology, clinical neurology, a branch of clinical medicine treating nerve diseases;
sex- (sex) + -patho- + logia $\rightarrow$ sexopathologia, ae $\mathrm{f}-$ sexopathology, a branch of medicine dealing with sexual disorders.

Some names of medical branches are formed by means of the final root element -iatria, which means some definite branches of clinical medicine:
geriatria, ae f - geriatrics, a particular branch of medicine treating diseases of older age;
paediatria, ae f - pediatrics, a branch of medicine treating children's diseases;
phoniatria, ae f - phoniatrics, a branch of medicine treating disorders of voice production;
phthisiatria, ae f - phthisiology, a branch of medicine treating tuberculosis;
psychiatria, ae f - psychiatrics (psychiatry), a branch of medicine treating mental diseases.

## § 117. NAMES OF MEDICAL SPECIALISTS

Most names of medical specialists are composed of the final root element -logus and the appropriate initial root element which determines the cardinal sense of the term. In this way the names of most biological and medical specialists are formed:
anthropolŏgus, i m - anthropologist, a specialist studying the man in the process of his evolution;
biolŏgus, i m - biologist, a specialist studying forms of life and living organisms;
diaetolŏgus, i m - dietarian, a specialist in the dietary nutrition;
haematolŏgus, i m - hematologist, a specialist in blood diseases.
If the name of a branch of medicine has the ending -pathologia, then the name of a specialist has the ending -patholŏgus:
neuropathologia $\rightarrow$ neuropatholŏgus, $\mathbf{i} \mathbf{~ m}$ - neuropathologist, a specialist in nerve diseases;
sexopathologia $\rightarrow$ sexopatholŏgus, i m - sexopathologist, a specialist treating sexual disorders.

If the name of a branch of medicine has the ending -iatria, then the name of a specialist has the ending -iāter:
paediatria $\rightarrow$ paediāter, tri m - pediatrician (=pediatrist), a specialist in children's diseases.

Finally, many Latin names of medical specialists are built by means of the suffix -ista and the initial root element:
oculista, ae m-oculist, a specialist treating eye diseases;
therapeutista, ae m-physician, therapeutist, a specialist treating inner organs.

## § 118. SOME NOTES ON THE NAMES OF MEDICAL SPECIALISTS IN LATIN AND ENGLISH

Names of medical specialists in Latin don't fully coincide with the English equivalents, as seen above. The difference lies not only on the morphological level (pthisiāter, tri m - phthisiologist), - sometimes the lexical units don't correspond to each other. For example, the name otorhinolaryngologist is not quite common for English or American medical vocabulary; - instead three separate terms are used: otologist, rhinologist and laryngologist. But, the term otolaryngologist is used as well. That is why it is more convenient to use this slightly artificial, but formally correct term otorhinolaryngologist, than to bring three English terms as equivalents. And otherwise, we tend to use the terms presented both in modern English and Latin medical language.

## § 119. NAMES OF MEDICAL EXAMINATIONS AND METHODS OF TREATMENT

The names of medical examinations are usually formed by means of the final root elements -graphia, -metria, -scopia, -diagnostica:
cystographia, ae $\mathbf{f}$ - cystography, X-ray examination of the urinary bladder;
pelvimetria, ae $\mathbf{f}$ - pelvimetry, measuring of pelvis size in women;
proctoscopia, ae f - proctoscopy, internal examination of the rectum; thermodiagnostíca, ae $\mathbf{f}$ - thermodiagnostics, a diagnosis via infrared radiation.

Names which signify methods of medical treatment usually contain the final root element -therapia and the initial root element indicating a method of treatment:
physiotherapia, ae $\mathbf{f}$ - physiatrics, treatment by means of natural or artificial physical factors;
phytotherapia, ae $\mathbf{f}$ - phytotherapy, treatment by means of medicinal herbs.

Results of X-ray, electric or other methods of medical examination are expressed by the final root -gramma:
haemogramma, ătis $\mathbf{n}$ - hemogram, results of quantitative and qualitative examination of blood;
mammogramma, ătis n - mammogram, an X-ray film of breast.
§ 120. TABLE OF INITIAL ROOT ELEMENTS

| Greek initial roots and its variants | Latin equivalents in dictionary form | English meaning | English word building equivalents |
| :---: | :---: | :---: | :---: |
| anthrop- | homo, ǐnis m | man | anthrop- |
| bi- | vita, ae f | life | bi- |
| cardi- | cor, cordis n | heart | cardi- |
| ger-, geront- | senex, senis m | old man or old age | ger-, geront- |
| gynaec- | femĭna, ae f | woman | gynaec- |
| haem-, haemat- | sanguis, ĭnis m | blood | hem-, hemat- |
| mast-, mamm- | mamma, ae f | breast | mast-, mamm- |
| neur- | nervus, i m | nerve | neur- |
| ophthalm-, -ophthalmia | ocǔlus, i m | eye | ophthalm-, -ophhalmia |
| ot- | auris, is f | ear | ot- |
| paed- | infans, ntis m, f | child | ped- |
| path- | morbus, i m | disease | path- |
| pharmac- | medicamentum, in | drug | pharmac- |
| phthisi- | tuberculosis, is f | tuberculosis | phthisi- |
| physi- | natūra, ae f | nature | physi- |
| phyt- | planta, ae f | plant, herb | phyt- |
| proct- | rectum, in | rectum | proct- |
| psych- | anĭmus, i m | psyche | psych- |
| rhin- | nasus, i m | nose | rhin- |
| somat- | corpus, ŏris n | body | somat- |
| stom-, stomat- | os, oris n | mouth | stom-, stomat- |

§ 121. TABLE OF FINAL ROOT ELEMENTS

| Final root <br> elements | English meaning |
| :---: | :--- |
| -diagnostĭca | examination of functional state of organs in order to reveal some disorders |
| -gĕnus, a, um | caused by any factor |
| -graphia | 1) X-ray examination; 2) examination by means of electricity; 3) recording <br> of the result of some examination |
| -gramma | result of some medical examination seen on a film or presented graphically |
| -iater | medical specialist treating certain inner diseases |
| -iatria | any definite branch of clinical medicine |
| -logia | name of some science or branch of clinical medicine |
| -logus | name of medical or biological specialists |
| -metria | measurement of physical characteristics of human body |
| -scopia | visual or instrumental visual examination |
| -therapia | method of treatment |

So, your task is to memorize the word building elements of this and the following lessons and combine these elements in terms. If you are not quite sure of your version of translation, consult the dictionary.

## § 122. ExERCISES

1. Give the dictionary form of the Latin equivalents corresponding to the following Greek roots:
cardi-, neur-, ot-, paed-, path-, pharmac-, physi-, phyt-, proct-, psych-
2. Give the Greek morphological elements corresponding to the following Latin nouns:
anĭmus, $i \mathrm{~m}$; auris, is f ; corpus, ǒris n ; femĭna, ae f ; homo, ĭnis m ; medicamentum, i n; morbus, i m; ocŭlus, i m; sanguis, ĭnis m; senex, senis m; tuberculōsis, is f ; vita, ae f
3. Determine orally the full dictionary form of each term and the meaning of the initial and final roots, write down the full definition:
anthropologia; anthropogěnus; biolŏgia; cardiolŏgus; cardiogĕnus; craniometria; geriāter; gynaecolŏgus; haematologia; iatrogěnus; mastogramma; neuropatholŏgus; ophthalmoscopia; otorhinolaryngologia; physiologia; phthisiāter; phytotherapia; proctolŏgus; psychiatria; rhinogramma; somatologia; stomatoscopia
4. Make up the Latin dictionary form of one-word terms with the following meaning:
branch of clinical medicine treating rectum diseases; branch of medicine treating diseases of children; diagnosis via examination of iris; medical specialist treating blood diseases; medical specialist treating inner organs; measurement of pelvis in women; results of quantitative and qualitative examination of blood; science studying drugs and their usage; treatment by
means of natural or artificial physical factors; specialist studying forms of life and living organisms; specialist studying the man in the process of his evolution; treatment by means of medical herbs; the X-ray examination of mamma
5. Give the Latin dictionary form and the full definition in English of the terms:
anthropologist; biopharmaceutics; cardiogram; cardiography; gerontology; hematology; hemogram; iatrogenic; iridodiagnostics; mammogram; neurogenic; ophthalmoscopy; otogenic; otolaryngologist; pediatrician; pharmacotherapy; phthisiologist; phytotherapy; proctodiagnostics; proctoscopy; psychiatrist; psychogenic; psychologist; rhinoscopy; somatology; stomatology; therapeutist; thoracometry

## § 123. VOCABULARY TO LESSON 19

## Latin-English vocabulary

anthropologia, ae f - anthropology, science studying the man in the process of his evolution
anthropolŏgus, i m - anthropologist, specialist studying the man in the process of his evolution
biologia, ae f - biology, science studying forms of life and vital organisms
cardiolŏgus, i m - cardiologist, medical specialist treating heart diseases
cardiogĕnus, a, um - cardiogenic, happening because of the heart
craniometria, ae f - craniometry, measurement size of the skull
geriāter, tri m - geriatrician, medical specialist treating diseases of the aged
gynaecolŏgus, i m - gynecologist, medical specialist treaing genital diseases in women
haematologia, ae f - hematology, branch of medicine studying blood and its diseases
iatrogĕnus, a, um - iatrogenic, happening because of the physician's manner or injudicious remarks
mastogramma, ătis n - mastogram, result of breast X-ray examination
neuropatholŏgus, i m - neuropathologist, specialist treating diseases of the nervous system
ophthalmoscopia, ae f - ophthalmoscopy, instrumental-visual examination of the eye
otorhinolaryngologia, ae f - otorhinolaryngology, branch of medicine treating diseases of ear, nose and larynx
physiologia, ae f - physiology, science studying normal vital processes in human body
phthisiāter, tri m - phthisiologist, specialist treating tuberculosis
phytotherapia, ae f - phytotherapy, method of treatment by means of medicinal herbs
proctolŏgus, i m - proctologist, specialist treating diseases of rectum
psychiatria, ae f — psychiatry, branch of medicine treating mental diseases rhinogramma, ătis $n$ - rhinogram, X-ray film of the nose
somatologia, ae f - somatology, branch of anthropology, studying structure of the human body
stomatoscopia, ae f - stomatoscopy, visual examination of the oral cavity

## English-Latin vocabulary

anthropologist, specialist studying the man in the process of his evolution anthropolŏgus, i m
biopharmaceutics, study of physical and chemical properties of medicinal substances - biopharmaceutĭca, ae f
branch of clinical medicine treating rectum diseases - proctologia, ae f
branch of medicine treating diseases of children - paediatria, ae $f$
cardiogram 1) result of X-ray examination of the heart; 2) graphical picture of heart action - cardiogramma, ătis n
cardiography 1) X-ray examination of the heart; 2) graphical recording of heart action - cardiographia, ae f
diagnosis via examination of iris, iridodiagnostics - iridodiagnostǐca, ae $f$
hemogram, results of quantitative and qualitative examination of blood haemogramma, ătis n
iatrogenic, happening because of the physician's manner or injudicious remarks - iatrogĕnus, a, um
iridodiagnostics, diagnosis via examination of iris - iridodiagnostǐca, ae f measurement of pelvis in women, pelvimetry - pelvimetria, ae $f$
medical specialist treating blood diseases, hematologist - haematolŏgus, i m
neurogenic, happening because of the nervous system disorders - neurogĕnus, a, um
ophthalmoscopy, instrumental-visual examination of the eye - ophthalmoscopia, ae $f$
otogenic, happening because of the ear - otogĕnus, $a$, um
otolaryngologist, specialist treating ear and larynx diseases - otolaryngolŏgus, i m
pediatrician, specialist treating children's diseases - paediāter, tri m
pharmacotherapy, the treatement of disease with drugs - pharmacotherapia, ae $f$
phytotherapy, method of treatment by means of medical herbs - phytotherapia, ae f
proctodiagnostics, examination of the functional state of the rectum proctodiagnostica, ae f
proctoscopy, instrumental-visual examination of the rectum - proctoscopia, ae f
psychiatrist, specialist treating mental diseases - psychiāter, tri m
phthisiologist, specialist treating tuberculosis - phthisiāter, tri m
results of quantitative and qualitative examination of blood, hemogram haemogramma, ătis n
rhinoscopy, instrumental-visual examination of the nose - rhinoscopia, ae f science studying drugs and their usage, pharmacology - pharmacologia, ae f somatology, branch of anthropology, studying structure of human body somatologia, ae f
specialist studying forms of life and living organisms, biologist - biolŏgus, i m
specialist studying the man in the process of his evolution, anthropologist anthropolŏgus, i m
specialist treating diseases of inner organs, therapeutist (therapist) therapeutista, ae m
stomatology, branch of clinical medicine treating diseases of the oral cavity stomatologia, ae f
therapeutist, specialist treating diseases of inner organs - therapeutista, ae m thoracometry, measurement of the size of the thorax - thoracometria, ae f treatment by means of medicinal herbs, phytotherapy - phytotherapia, ae f treatment by means of natural or artificial physical factors, physiotherapy physiotherapia, ae f
the X-ray examination of mamma, mammography - mammographia, ae f
Lesson 20
ONE-WORD NAMES OF FUNCTION DISORDERS, PATHOLOGICAL PROCESSES AND ABNORMAL CONDITIONS

## § 124. ONE-WORD NAMES OF FUNCTIONAL DISORDERS

Usually, one-word names of functional disorders are composed of Greek prefixes and roots. There are the following prefixes:

1. The prefix a- (before a consonant) or an- (before a vowel). This prefix signifies cessation or loss of a function as well as lack of property:
adentia, ae $\mathbf{f}$ - lack of teeth, adentia;
anuria, ae $\mathbf{f}$ - complete cessation of the secretion and excretion of urine, anuria;
aphagia, ae $\mathbf{f}$ - a condition in which the ability of swallowing is lacking, aphagia;

In the same way the Latin prefix in- (im- before consonants $\mathbf{b}$ or $\mathbf{m}$ ) combined with Latin roots is used both in nouns and adjectives:
incontinentia, ae $\mathbf{f}$ - lack of voluntary control over the discharge of faeces or urine, incontinence;
insufficientia, ae $\mathbf{f}$ - state of being inadequate to perform normal functions, insufficiency;
immobilĭtas, ātis $\mathbf{f}$ - lack of mobility, immobility;
insensibilis, e - lack of sensibility or intelligence, insensible.
2. The prefix dys- signifies functional disorders:
dysgeusia, ae $\mathbf{f}$ - impairment or perversion of the sense of taste, dysgeusia;
dysthyreōsis, is $\mathbf{f}$ - imperfect functioning of the thyroid gland, dysthyreōsis;
dysuria, ae $\mathbf{f}$ - condition in which the passage of urine is difficult, dysuria.
3. The prefix en- (em- before consonants $\mathbf{b}, \mathbf{m}, \mathbf{p}$ ) indicates the inner location of any morbid condition:
empyēma, ătis $\mathbf{n}$ - accumulation of pus in a cavity;
enophthalmus, i m - recession of the eyeball into the cavity of the orbit
As prefixed elements some Greek adjectives, pronouns and numerals are used:

| Prefix | Meaning | Latin example | English translation |
| :---: | :---: | :---: | :--- |
| auto- | self-, resulting <br> of one's own <br> action | autopepsia, ae f <br> (autoly̆sis, is f) | the process of spontaneous disintegration <br> of cells and tissues resulting from the action <br> of intracellular enzymes, autopepsia (autolysis) |
| mono- | one (part) | monoplegia, ae f | a pathological condition in which only one <br> muscle, one group of muscle or one part <br> of the body is affected, monoplegia |
| di- | two (parts) | diplegia, ae f | paralysis of similar parts on both sides <br> of the body, diplegia |
| hemi- | half | hemialgia, ae f | neuralgic pain affecting the right or the left <br> side of the body or the right or the left side <br> of any part of the body, hemialgia |

## § 125. ONE-WORD NAMES OF PATHOLOGICAL PROCESSES AND ABNORMAL CONDITIONS

The majority of one-word names of pathological processes and abnormal conditions are composed of Greek roots, suffixes and endings which are adapted to Latin grammar system. One group of terms consists of a root, a suffix and an ending. Two suffixes of this group compose a morphological unity with their endings:

| Latin suffix | Meaning | Latin <br> example | English <br> equivalent | Full English <br> explanation |
| :---: | :--- | :--- | :--- | :--- |
| -ismus <br> (suffix -ism- + -us, <br> ending of the 2nd <br> declension) | abnormality or pathological <br> process, the meaning of <br> which is determined by the <br> root element | botulismus, i <br> m | botulism | a form of food <br> poisoning due <br> to the botulinum <br> toxin |
| $-\overline{\text { ōsis }}$ <br> (suffix -os- +-is, <br> ending of the 3rd <br> declension) | pathological condition or <br> process | dermatōsis, <br> is f | dermatōsis | any skin disease |

Attention! The final suffix -ōsis may be used as the morphological part of a noun term not denoting a disease:
diagnōsis, is f - diagnosis, the scientific recognition of the disease from which a person suffers;
symbiōsis, is f - symbiosis, the intimate association of two organisms.
The next two suffixes are considered as final suffixed elements of the nouns of the 3rd declension:

| Latin <br> suffix | Meaning | Latin <br> example | English <br> equivalent | Full English <br> explanation |
| :---: | :---: | :---: | :---: | :---: |
| -ēma | different pathological <br> conditions | enanthēma, <br> ătis $n$ | enanthema | the rash or eruption on <br> the mucous tissue |
| -iăsis | different pathological <br> conditions | psoriăsis, is f | psoriasis | a chronic disease of the skin <br> characterized by the appearance <br> of laminated scales |

But the majority of terms composed of morphological elements present with initial and final roots. First of all, the root path- combined with the ending -ia is used:
arthropathia, ae $\mathbf{f}$ - any disease affecting a joint, athropathy;
nephropathia, ae $\mathbf{f}$ - a disease of the kidney, nephropathy;
rhinopathia, ae f - any morbid condition of the nose, rhinopathy.
Other roots are also used as final elements which define more precisely the character of pathological condition, e. g.:
angiorrhagia, ae f-a hemorrhage from a vessel, angiorrhagia;
arthralgia, ae $\mathbf{f}$ - any kind of pain affecting a joint, arthralgia;
cancerophobia, ae $\mathbf{f}$ - unfounded or unreasonable fear that there is a predisposition to carcinoma, cancerophobia (=carcinomatophobia).

Nevertheless, about $20 \%$ of one-word terms signifying pathological processes and abnormal conditions are nouns comprised of one root:
coma, ătis $\mathbf{n}$ - the state of complete loss of consciousness with a disorder of vitally important functions, coma;
infarctus, us $\mathbf{m}$ - an area of dead tissue produced by the obstruction of an end artery, infarction;
insultus, us $\mathbf{m}$ - cerebral thrombosis, stroke;
sepsis, is $\mathbf{f}$ - infection with pyogenic microorganisms, sepsis

## § 126. Initial Greek roots and their Latin Equivalents

| Initial Greek roots <br> and their variants | Latin equivalents in <br> dictionary form | English <br> meaning | English word building <br> equivalents |
| :---: | :---: | :---: | :---: |
| angi- | vas, vasis n | vessel | angi- |
| arthr- | articulatio, ōnis f | joint | arthr- |
| brady- | lentus, a, um | slow | brady- |
| cephal- | caput, ìtis n | head | cephal- |


| Initial Greek roots and their variants | Latin equivalents in dictionary form | English meaning | English word building equivalents |
| :---: | :---: | :---: | :---: |
| chondr- | cartilāgo, ĭnis f | cartilage | chondr- |
| dactyl-, -dactylia | digitus, i m | finger or toe | dactyl- |
| derm-, dermat-, -dermia | cutis, is f | skin | derm-, dermat-, -dermia |
| encephal- | cerěbrum, in | brain | encephal- |
| my- | muscŭlus, i m | muscle | my- |
| nephr- | ren, renis m | kidney | nephr- |
| oste- | os, ossis n | bone | oste- |
| phon-, -phonia | vox, vocis f | voice | phon-, -phonia |
| phot- | lux, lucis f | light | phot- |
| phleb- | vena, ae f | vein | phleb- |
| pseud- | falsus, a, um | false | pseud- |
| spasm-, -spasmus | spasmus, i m | spasm | spasm-,-spasm |
| tox-, toxic- | venēnum, in | poison | tox-, toxic- |
| tachy- | celer, ěris, ěre | fast, quick | tachy- |
| trich-, -trichia | capillus, i m; pilus, i m | hair | trich- |
| xer- | siccus, a, um | dry | xer- |

§ 127. TABLE OF FINAL ROOT ELEMENTS

| Final root <br> elements | English meaning |
| :---: | :--- |
| -algia | pain in any part of the body |
| -geusia | different pathological conditions of taste |
| -kinesia | different pathological conditions of voluntary motion |
| -malacia | pathological softening of an organ or tissue |
| -mania | any form of mental disorder accompanied by some degree of excitation |
| -mycōsis | a morbid condition caused by a pathogenic fungus |
| -opia, -opsia | any condition of vision |
| -pathia | a general name of a disease of any organ due to various causes |
| -pepsia | any condition of digestion |
| -phagia | any pathological condition in the act of swallowing |
| -philia | predisposition to any morbid condition |
| -phobia | a pathological fear |
| -plegia | paralysis (palsy) of the muscles of any organ |
| -pnoë | a pathological condition of breathing |
| -trophia | nutrition |

## § 128. EXERCISES

1. Give the dictionary form of the Latin equivalents corresponding to the following Greek roots:
angi-, arthr-, chondr-, nephr-, phon-, phot-, phleb-, pseud-, tachy-, trich-
2. Give the Greek roots corresponding to the following Latin nouns or adjectives:
caput, îtis $n$; cutis, is f; digĭtus, i m; lentus, a, um; os, ossis $n$; siccus, a, um; vena, ae f; venēnum, in.
3. Complete (orally) the dictionary form of each noun. Determine the meaning of each initial and final morphological element; write down the full definition of each term and its English equivalent:
angiopathia; arthromalacia; autohaemotherapia; autopepsia; bradyphagia; bradypnoë; chondropathia; dactylospasmus; dermatōsis; dermatomycōsis; dysgeusia; encephalogramma; gastrospasmus; hemicrania; hemianopsia; hemiplegia; monodactylismus; myoplegia; osteomalacia; osteopathia; phlebocarcinōma; photophobia; pseudoarthrōsis; spasmophilia; stomatomycōsis; tachycardia; toxicomania; xerophthalmia
4. Make up the Latin dictionary form of one-word terms with the following meaning:
abnormal quickness in eating; a chronic disease of the skin, characterized by the appearance of laminated scales; a condition in which the ability to swallow is lacking; any disease affecting a joint; any disease of the skin; any morbid condition or abnormal growth of the hair; any morbid condition of the nose; a pathological condition in which only one muscle, one group of muscle or one part of the body is affected; impairment of any voice; kind of pain affecting a joint; paralysis of similar parts on both sides of the body; the rash or eruption on the mucous tissue; the X-ray examination of the great vessels and the chambers of the heart; unfounded or unreasonable fear that there is a predisposition to carcinoma
5. Give the full definition in English and the Latin dictionary form of the terms:
angiology; apnoea; arthralgia; atrichia; atrophy; autolaryngoscopy; autopsy; biopsy; bradycardia; cephalalgia; didactylism; dystrophy; encephalomalacia; enophthalmus; hemiatrophy; hemophilia; mastopathy; monopathophobia, myopia, nephrogenic, nephropathy, ophthalmoplegia, osteochondrosis; osteodystrophy; pharmacophobia; phoniatrics; phlebography; phonocardiogram; photophobia; proctospasm; rhinopathy; tachyphagia; toxicosis; xerostomia

## § 129. Vocabulary to lesson 20

## Latin-English vocabulary

angiopathia, ae f - any disease of blood vessels, angiopathy
arthromalacia, ae f - softening of joints, arthromalacia
autohaemotherapia, ae f - a method of treatment in which the patient's own
blood is administered to him, autohaemotherapy
autopepsia, ae f - the process of a spontaneous disintegration of cells and tissues resulting from the action of intracellular enzymes, autopepsia
bradyphagia, ae f - slowing of swallowing, bradyphagia
bradypnoë, es f - an abnormally slow rate of breathing, bradypnoea
chondropathia, ae f - any disease affecting a cartilage, chondropathy
dactylospasmus, i m - spasmodic contraction of a finger or toe, dactylospasm dermatōsis, ae f - any disease of the skin, dermatosis
dysgeusia, ae f - impairment or perversion of the sense of taste, dysgeusia dermatomycōsis, ae f - a generic term for all cutaneous infections due to fungi encephalogramma, ătis $n$ - any X-ray film obtained in the radiological examination of the ventricles and subarachnoid space of the brain, encephalogram
gastrospasmus, i m - an involuntary contraction of the stomach muscle, gastrospasm
hemicrania, ae f - a periodic morbid condition with localized headaches, hemicrania
hemianopsia, ae f (=hemianopia, ae f) - loss of half the vision in each eye, hemianopsia (hemianopia)
hemiplegia, ae f - paralysis of one side of the body, hemiplegia
monodactylismus, i m - a congenital condition in which only one finger or toe is present on the hand or the foot, monodactylism
myoplegia, ae f - paralysis of muscle or a condition in which muscular force is decreased, myoplegia
osteomalacia, ae f - softening of bones, osteomalacia
osteopathia, ae f - disease of bones, osteopathia
phlebocarcinōma, ătis n - a malignant epithelial tumour affecting a vein, phlebocarcinoma
photophobia, ae f-abnormal intolerance to light, photophobia
pseudarthrōsis, is f - a false joint formed between the fragments of a fractured bone which have failed to unite, pseudarthrosis
spasmophilia, ae f - a morbid state in which there is a tendency to convulsions and a spasm, spasmophilia
stomatomycōsis, is f - any morbid condition caused by a microscopical fungus, stomatomycosis
tachycardia, ae f - a rapid action of the heart, tachycardia
toxicomania, ae f - an insane desire for poison, toxicomania
xerophthalmia, ae f - a morbid condition of eyes, characterized by a shrunken appearance of the conjunctiva, xerophthalmia (=xeroma)

## English-Latin vocabulary

abnormal quickness in eating, tachyphagia - tachyphagia, ae f
a chronic disease of the skin, characterized by the appearance of laminated scales, psoriasis - psoriăsis, is $f$
a condition in which the ability to swallow is lacking, aphagia - aphagia, ae f angiology, the science of blood vessels - angiologia, ae f
any disease affecting a joint, arthropathy - arthropathia, ae f
any disease of the skin, dermatosis - dermatōsis, is f
any kind of pain affecting a joint, arthralgia - arthralgia, ae f
any morbid condition of the nose, rhinopathy - rhinopathia, ae f
any morbid condition or abnormal growth of the hair, trichopathy trichopathia, ae f
a pathological condition in which only one muscle, one group of muscle or one part of the body is affected, monoplegia - monoplegia, ae $f$
apnea, the cessation of breathing - apnoë, ës $f$
arthralgia, any kind of pain affecting a joint - arthralgia, ae f
atrichia, not having hair - atrichia, ae f
atrophy, a condition of general malnutrition from whatever cause - atrophia, ae f
autolaryngoscopy, the examination of one's own larynx with a laryngoscope autolaryngoscopia, ae f
autopsy, post-mortem examination of a body in order to establish the cause of death - autopsia, ae f
biopsy, examination for purposes of diagnosis of issue cut from the living body - biopsia, ae f
bradycardia, slowing of the heart rate - bradycardia, ae f
cephalalgia, pain in the head - cephalalgia, ae f
didactylism, the congenital condition of having only two fingers on a hand or two toes on a foot - didactylismus, i m
dystrophy, a disorder of the structure and functions of an organ or tissue due to perverted nutrition - dystrophia, ae f
encephalomalacia, softening of the brain - encephalomalacia, ae f
enophthalmus, recession of the eyeball into the cavity of the orbit enophthalmus, i m
hemiatrophy, atrophy affecting only one side of the body, or one half of an organ - hemiatrophia, ae f
hemophilia, a severe hereditary bleeding disease affecting males and transmitted by females - haemophilia, ae f
impairment of the voice, dysphonia - dysphonia, ae f
mastopathy, any diseased condition of the mammary gland - mastopathia, ae f
monopathophobia, fear of a particular disease - monopathophobia, ae f
myopia, short sight - myopia, ae f
nephrogenic, produced by or originating in the kidney - nephrogěnus, a um
nephropathy, a disease of the kidney - nephropathia, ae f
ophthalmoplegia, palsy (paralysis) of ocular muscles - ophthalmoplegia, ae f
osteochondrosis, a degenerative change in bony and cartilage tissues osteochondrosis, is f
osteodystrophy, a disorder of bone nutrition - osteodystrophia, ae f
paralysis of similar parts on both sides of the body, diplegia - diplegia, ae f
pharmacophobia, a morbid fear of taking drugs or medicines pharmacophobia, ae f
phoniatrics (=phoniatry), the treatment of disorders of speech - phoniatria, ae $f$ phlebography 1) a radiographic visualization of veins; 2) the tracing of the venous pulse by means of a phlebograph - phlebographia, ae f
phonocardiogram, the record produced by an instrument for recording heart sounds - phonocardiogramma, ătis n
photophobia, abnormal intolerance to light - photophobia, ae f proctospasm, a spasmatic contraction of the rectum - proctospasmus, i m rhinopathy, any morbid condition of the nose - rhinopathia, ae $f$ tachyphagia, abnormal quickness in eating, tachyphagia - tachyphagia, ae f the rash or eruption on the mucous tissue, enanthema - enanthēma, ătis $n$ paralysis of similar parts on both sides of the body, diplegia - diplegia, ae f the X-ray examination of the great vessels and the chambers of the heart, angiocardiography - angiocardiographia, ae $f$
toxicosis, a pathological condition caused by the absorption of poisons toxicōsis, is f
unfounded or unreasonable fear of a predisposition to carcinoma cancerophobia, ae f
xerostomia, dryness of the mouth due to failure of the salivary gland xerostomia, ae f

## Lesson 21 <br> NAMES OF QUALITATIVE AND QUANTITATIVE ABNORMALITIES IN MORPHOLOGICAL STRUCTURES AND PHYSIOLOGICAL PROCESSES

## § 130. INCREASE AND DECREASE IN DIFFERENT QUANTITATIVE CONDITIONS

Increase and decrease of different quantitative conditions may, as a rule, be expressed by means of the prefixes hyper- and hypo- which are joined by final root elements:
hyperaesthesia, ae f - excessive sensitiveness of the skin, hyperaesthesia;
hyperkinesia, ae $\mathbf{f}$ - a condition in which there is abnormally great strength of movement, hyperkinesia;
hyperplasia, ae $\mathbf{f}$ - any condition in which there is an increase in the number of cells in any body's part, hyperplasia;
hypodynamia, ae $\mathbf{f}$ - diminished muscular or nervous energy, hypodynamia;
hypogalactia, ae $\mathbf{f}$ - the secretion of a too small quantity of milk, hypogalactia;
hypopepsia, ae $\mathbf{f}$ - abnormal slowness and weakness of the process of digestion, hypopepsia.

Increase and decrease in the functional activity is sometimes expressed by means of the initial roots tachy- and brady-:
tachypnoë, ës f - abnormally rapid breathing, tachypnoea
bradykinesia, ae $\mathbf{f}$ - abnormal sluggishness of physical movements, bradykinesia

## § 131. INCREASE OR DECREASE IN DIMENSION OF ANATOMICAL AND HISTOLOGICAL STRUCTURES

Increase in size of anatomical or histological structures is expressed by means of the following initial and final roots: dolich-, macr-, mega-, megal-, -megalia:
dolichocōlon, i n - an abnormally long colon of normal diameter, dolichocolon
macrocy̆tus, i m - a red blood cell that is larger than normal, macrocyte
megaduodēnum, $\mathbf{i} \mathbf{n}$ - duodenum of abnormally large size, megaduodenum
megalosplenia, ae $\mathbf{f}$ - enlargement of the spleen, megalosplenia
hepatomegalia, ae $\mathbf{f}$ - a condition of enlargement of the liver, hepatomegalia

Decrease in size of anatomical and histological structures is expressed by means of the initial roots brachy- and micr-:
brachydactylia ae $\mathbf{f}$ - a condition in which there are abnormally short fingers or toes, brachydactylia
microcephălus, $\mathbf{i} \mathbf{m}$ - a person with an unusually small size of head, microcephalus.

Dilatation or narrowing in volume of a hollow organ, cavity or tube is epressed by means of the following roots:
-ectasia, -ectăsis, -dilatatio, sten-, -stenōsis:
bronchiectăsis, is $\mathbf{f}$ - a condition of dilatation of a bronchus or bronchi, bronchiectasis
gastrectasia, ae fedilatation of the stomach, gastrectasia
vasodilatatio, $\overline{\mathbf{o}}$ nis $\mathbf{f}$ - dilatation of a blood vessel, vasodilatation
stenostomia, ae $\mathbf{f}$ - abnormal narrowness of the mouth, stenostomy
oesophagostenōsis, is $\mathbf{f}$ - narrowing of the oesophagus, oesophagostenosis

## § 132. INCREASE AND DECREASE IN THE QUANTITY OF ANATOMICAL AND HISTOLOGICAL STRUCTURES

Increase and decrease in the quantity of anatomical and histological structures is expressed by means of the roots olig-, poly-, -penia:
oligodontia (=oligodentia), ae f - a state in which most of the teeth are lacking, oligodontia
polyarthropathia, ae $\mathbf{f}$ - a pathological condition involving many joints, polyarthropathy
erythropenia, ae $\mathbf{f}$ - a state in which there are too few erythrocytes in the blood, erythropenia

Increase in the quantity of any anatomical or histological structure may also be expressed by the final prefix -ōsis:
leucocytōsis, is $\mathbf{f}$ - an increase in the total number of leucocytes in the blood, leucocytosis
papillomatōsis, is $\mathbf{f}$ - the condition of diffuse formation of papillomata, papillomatosis
§ 133. Table of initial root elements

| Greek root and its variants | Latin equivalents in dictionary form | English meaning | English word building equivalents |
| :---: | :---: | :---: | :---: |
| aesthes-, -aesthesia | sensus, us m | sensibility, sensitiveness | aesthes-, -aesthesia |
| brachy- | brevis, e | short | brachy- |
| cheil-, -cheilia | labium, i n | lip | cheil-, -cheilia |
| cyt-, -cy̆tus | cellŭla, ae f | cell | cyt-, -cyte |
| dolich- | longus, a, um | long | dolich- |
| erythr- | ruber, bra, brum | red | erythr- |
| gloss-, -glossia | lingua, ae f | tongue | gloss-, -glossia |
| glyc- | dulcis, e | sugar | glyc- |
| gnath-, -gnathia | maxilla, ae f | maxilla, upper jaw | gnath-, -gnathia |
| leuc- | albus, a, um | white | leuc- |
| macr-, mega-, megal-, -megalia | magnus, a, um | large | macr-, mega-, megal-, -megalia |
| melan- | niger, gram, grum | black | melan- |
| micr- | parvus, a, um | small | micr- |
| myel, -myelia | 1) medulla ossium <br> 2) medulla spinālis | 1) bone marrow <br> 2) spinal cord | myel, -myelia |
| odont-, -odonia, -dentia | dens, dentis, m | tooth | odont-, -odonia -dentia |
| olig- | parvus, a, um | few | olig- |
| pod-, -podia | pes, pedis m | foot | pod-, -podia |
| poly- | multus, a, um | many | poly- |
| splen-, -splenia | lien, ēnis m | spleen | splen-, -splenia |
| sphygm--sphygmia | pulsus, us m | pulse | sphygm-, <br> -sphygmia |
| therm-, <br> - thermia | 1) calor, ōris $m$ <br> 2) temperatūra, ae f | 1) heat <br> 2) temperature | therm-, -thermia |
| thyre- | glandŭla thyr(e)oidea | thyroid (gland) | thyro- |

Attention! 1. The initial roots macr- and megal- may be used in many (but not in all!) cases as synonyms: macrocephalia $=$ megalocephalia, macropodia $=$ megalopodia. When choosing the necessary variant of the initial root one should consult the dictionary.
2. The root -cyt- can be omitted if the term begins with erythrocyt- or leucocyt- and ends with -penia:
erythrocytopenia = erythropenia; leucocytopenia = leucopenia, but: monocytopenia, thrombocytopenia - the only variants.
§ 134. Table of final roots

| Final root <br> elements | English meaning |
| :---: | :--- |
| -aemia | any condition of the blood |
| -genĕsis | the origin and (formative) development |
| -genia | any condition of mandible |
| -mnesia | any condition of the memory |
| -penia | a diminution in the number of any kind of cells present in the blood |
| -phrenia | a condition associated with a serious mental disorder |
| -plasia | the development of tissues |
| -poësis | the formation 1) of cells present in the blood; 2) of lymph; 3) of urine |
| -sthenia | any condition of strength, vigour or forcefulness |
| -tensio | a condition of arterial blood pressure |
| -tonia | a condition of muscular tension in the walls of vessels and bowels |

## § 135. ExERCISES

1. Give the dictionary form of the Latin equivalents corresponding to the following Greek roots:
brachy-, dolich-, erythr-, glyc-, leuc-, melan-, micr-, olig-, poly-, thyre-
2. Write the dictionary form of the Latin equivalents and then give: 1) Greek equivalents corresponding to every Latin equivalent 2) English meaning of every pair of equivalents:
calor; cellŭla; dens; labium; lingua; lien; magnus; maxilla; medulla ossium; pes; pulsus; sensus
3. Complete (orally) the dictionary form of each noun. Determine the meaning of each initial and final morphological element; write down the full definition of each term as well as its English equivalent:
amnesia; anaesthesiolŏgus; apodia; asthenia; brachycephălus; brachydactylia; dolichocephalia; dysthyreōsis; erythropenia; glossoplegia; glycaemia; hyperaemia; hyperthermia; hypotonia; leucocytōsis; melanoderma; microgenia; micromyelia; odontogeněsis; oligocytaemia; oligophrenia; polymastia; prognathia; sphygmogramma; splenomegalia; thermotherapia; thrombocytopoësis; thyreotoxicōsis
4. Make up the Latin dictionary form of one-word terms with the following meaning:
abnormal narrowness of the mouth; abnormal slowness and weakness of the process of digestion; abnormal sluggishness of physical movements; a condition in which there are abnormally short fingers or toes; a condition of enlargement of the liver; an abnormally long colon of normal diameter; an increase in the total number of leucocytes; a pathological condition involving many joints; a person with an unusually small size of head; a red blood cell that is larger than normal; a state in which most of the teeth are lacking; a state in which there are too few erythrocytes; dilatation of the stomach; excessive sensitiveness of any organ or part of the body; the origin and development of bone marrow; the origin and development of morbid condition; extremely rapid breathing
5. Give the full definition and the Latin dictionary form of the terms:
aglossia; anaemia; brachyoesophagus; cytology; dolichocolon; dystonia; erythema; gnathalgia; haematomyelia; hepatomegalia; hyperesthesia; hyperglycaemia; hypertension; hypomnesia; hypophrenia; hypoplasia; hypothermia; macrocyte; megaloduodenum; megalomania; melanocarcinoma; micromastia; microsphygmy; monocytopoesis; myelocytaemia; oligodactylia; podagra; podalgia; polyavitaminosis; splenohepatomegaly

## § 136. Vocabulary to Lesson 21

## Latin-English vocabulary

amnesia, ae f - loss of memory of varying degree, amnesia
anaesthesiolŏgus, i m - a specialist in the administration of anaesthetics, anaesthesiologist
apodia, ae f - congenital absence of feet, apodia
asthenia, ae f - loss of vital forces, asthenia
brachycephălus, i m - an individual with disproportionately short head, brachycephalic
brachydactylia, ae f - a condition in which there are abnormally short fingers or toes, brachydactylia
dolichocephalia, ae f - the state of having a relatively long skull, dolichocephalia
dysthyreōsis, ae f - imperfect functioning of the thyroid gland, dysthyreosis
erythropenia, ae f - a state in which there are too few erythrocytes, erythropenia
glossoplegia, ae f - paralysis of the tongue, glossoplegia
glycaemia, ae f - a condition in which the circulating blood contains a quantity of sugar above normal amounts, glycaemia
hyperaemia, ae f - an excess of blood in any part of the body, hyperaemia
hyperthermia, ae f - very high body temperature, hyperthermia
hypotonia, ae f - lessened tension in any body structure, hypotonia
leucocytōsis, is f - an increase in the total number of leucocytes in the blood, leucocytosis
melanoderma, ătis $n$ - a condition in which there is an unusually large accumulation of melanin in the skin, melanoderma
microgenia, ae f - a condition in which the chin is of unusually small size, microgenia
micromyelia, ae f - general reduction in size of the spinal cord, micromyelia odontogeněsis, is f - the origin and formative development of teeth, odontogenesis
oligocytaemia, ae f - a condition in the blood in which there is cell deficiency, oligocytaemia
oligophrenia, ae f - congenital lack of the mentality, oligophrenia
polymastia, ae f - a state in which in human beings there are more than two distinct mammary glands, polymastia
prognathia, ae f - a condition in which there is abnormal projection of one or both jaws, prognatism
sphygmoramma, ătis $n$ - a record of the arterial pulse waves, sphygmogram
splenomegalia, ae f - enlargement of the spleen, splenomegalia
thermotherapia, ae f - the use of heat in the treatment of disease, thermotherapia
thrombocytopoësis, is f - the formation of blood platelets, thrombocytopoiesis thyreotoxicōsis, is f - any toxic condition attributable to hyperactivity of the thyroid gland, thyrotoxicosis

## English-Latin vocabulary

abnormal slowness and weakness of the process of digestion, hypopepsia hypopepsia, ae f
abnormally rapid breathing, tachypnea - tachypnoë, ës f
a condition of enlargement of the liver, hepatomegalia - hepatomegalia, ae f
a condition in which there are abnormally short fingers or toes, brachydactylia brachydactylia, ae f
aglossia, a congenital condition of being devoid of a tongue - aglossia, ae $f$ an abnormally long colon of normal diameter, dolichocolon - dolichocōlon, in anaemia, a condition of the blood in which there are quantitative and qualitative changes in the red cells resulting in a reduction in the total amount of blood anaemia, ae f
an increase in the total number of leucocytes, leucocytosis - leucocytōsis, is $f$
a pathological condition involving many joints, polyarthropathy polyarthropathia, ae f
a person with an unusually small size of head, microcephalus - microcephălus, i m
a red blood cell that is larger than normal, macrocyte - macrocy̆tus, i m
a state in which most of the teeth are lacking, oligodentia - oligodentia, ae f a state in which there are too few erythrocytes, erythropenia - erythropenia, ae f brachyoesophagus, a congenitally short oesophagus - brachyoesophăgus, i m dilatation of the stomach, gastrectasia - gastrectasia, ae f
dolichocolon, an abnormally long colon of normal diameter - dolichocōlon, i n cytology, the science of the form and functions of cells - cytologia, ae f
dystonia, a state of disordered tonicity - dystonia, ae f
erythema, redness of the skin due to hyperaemia - erythēma, ătis n
excessive sensitiveness of any organ or part of the body, hyperaesthesia -
hyperaesthesia, ae f
extremely rapid breathing, tachypnea - tachypnoë, ës f
gnathalgia, pain in one or both jaws - gnathalgia, ae f
haematomyelia, bleeding within the substance of the spinal cord haematomyelia, ae f
hepatomegalia, a condition of enlargement of the liver - hepatomegalia, ae $f$
hyperaesthesia, excessive sensitiveness of any organ or part of the body hyperaesthesia, ae f
hyperglycaemia, an excessive amount of sugar in the blood - hyperglycaemia, ae f
hypertension, high arterial blood pressure - hypertensio, ōnis f
hypomnesia, a weak or defective state of the memory - hypomnesia, ae f
hypophrenia, feebleness of mind - hypophrenia, ae f
hypoplasia, underdevelopment of a tissue or part - hypoplasia, ae f
hypothermia, deficiency of body heat - hypothermia, ae f
macrocyte, a red blood cell that is larger than normal - macrocy̆tus, i m
megaloduodenum, duodenum of abnormally large size - megaloduodēnum, i n megalomania, a mental condition in which a person has grandiose delusions about himself and his own intellect, power, importance and so on megalomania, ae f
melanocarcinoma, a darkly pigmented malignant epithelial tumor melanocarcinōma, ătis $n$
micromastia, abnormal smallness of the mammary glands - micromastia, ae f
microsphygmy, diminished strength of pulse - microsphygmia, ae f
monocytopoiesis, the production of monocytes in the bone marrow monocytopoësis, is f
myelocytaemia, the presence of myelocytes in the blood - myelocytaemia, ae f oligodactylia, a congenital deficiency of fingers or toes - oligodactylia, ae f podagra, gout, a disease of the purine metabolism characterized by attacks of arthritis with an assotiated raised serum uric acid - podăgra, ae f
podalgia, sensation of pain in the foot - podalgia, ae $f$
polyavitaminosis, a morbid condition caused by deficiency of several vitamins - polyavitaminōsis, is f
splenohepatomegaly, enlargement of the spleen - splenohepatomegalia ae $f$ the origin and development of the bone marrow, myelogenesis - myelogeněsis, is f
the origin and development of a morbid condition, pathogenesis pathogeněsis, is f

## Lesson 22

## NAMES OF INFLAMMATORY PROCESSES WHICH OCCUR IN ORGANS AND TISSUES. NAMES OF ABNORMALITIES IN THE STATES OF PHYSIOLOGICAL FLUIDS

## § 137. NAMES OF INFLAMMATORY CONDITIONS

The state of inflammation in any organ or tissue, as a rule, is usually expressed by means of the final suffixed element -ītis which is transformed into -itĭdis in the Genitive form. The suffix - $\overline{1}$ tis is added to the initial root of the noun which defines the place of a morbid state. All the terms with the suffix $-\overline{1} t i s$ are nouns of the 3 rd declension:
arthr- (joint) $+\overline{\text { intis }} \rightarrow$ arthrītis, itǐdis $\mathbf{f}$ — inflammation of a joint, arthritis
hepat- (liver) + ītis $\rightarrow$ hepatītis, itĭdis $\mathbf{f}$ - inflammation of the liver, hepatitis

The suffix -ītis may be added both to the Greek and Latin roots:
nephr- (Greek nephros kidney) + ītis $\rightarrow$ nephrītis, itĭdis $\mathbf{f}$ an inflammatory disease of the kidneys, nephritis
tonsill- (Latin tonsilla, ae f tonsil) $+\overline{\mathrm{i}}$ tis $\rightarrow$ tonsillītis, itĭdis $\mathbf{f}-$ an inflammation of the tonsil, tonsillitis

The site of the inflammatory process can be defined more precisely by means of the following prefixes of the Greek origin:

1) endo- (inner, mostly a mucous part of an organ):
endo + metr- (utěrus, i m ) + ītis $\rightarrow$ endometrītis, itĭdis f - an inflammation of the inner mucous membrane of the uterus, endometritis
2) para- (cellular, connective and other tissues near an organ):
para- + cyst (urinary bladder) $+\overline{1}$ tis $\rightarrow$ paracystītis, itĭdis $f$ - a condition of inflammation affecting the connective and other tissues lying close to the bladder, paracystitis
3) peri- (tissues enclosing an organ):
peri- + card- (heart) $+\overline{1}$ itis $\rightarrow$ pericardītis, itĭdis $\mathrm{f}-$ an inflammation of the membrane enveloping the heart, pericarditis.

Names of some inflammatory morbid conditions are formed without suffix -ītis, e. g.:
panaritium, in - an inflammation in the nail fold, panaris (=panaritium);
pneumonia, ae $\mathbf{f}$ - an inflammation of the spongy tissue of the lung, pneumonia

## § 138. NAMES OF MORBID CONDITIONS OF PHYSIOLOGICAL FLUIDS

Due to inflammatory processes some specific fluids may accumulate or be produced in cavities and tissues:
exsudātum, i n - a fluid extravasated into a cavity, exudate;
transsudātum, in - any fluid that has passed through a membrane or the skin, transudate.

The abnormal accumulation of fluid in a tissue or cavity space is generally called hydrops, $\overline{\mathbf{o}}$ pis $\mathbf{m}$ - hydrops, dropsy. This noun is used with adjectives and any other noun:
hydrops vesicae felleae - fluid swelling in the gall bladder.
The presence of excessive fluid in the cavity of a definite part of the body is expressed by the prefix hydro- and a final root with the ending of the 1 st, 2 nd or 3rd declension:
hydrometra, ae $\mathbf{f}$ - an accumulation of watery fluid in the cavity of the uterus, hydrometra;
hydropericardium, in - excessive accumulation of serous fluid in the pericardium, hydropericardium;
hydrarthrōsis, is $\mathbf{f}$ - a watery effusion into the cavity of a joint, hydrarthrosis.

Pus also refers to the fluids accumulated due to the inflammatory processes. The presence of pus is expressed in one-word terms by the initial root py- (Greek pus) and the final roots together with the grammar ending:
pyopericardium, $\mathbf{i} \mathbf{n}$ - an accumulation of pus in the pericardium, pyopericardium;
pyuria, ae $\mathbf{f}$ - a condition in which pus is present in the urine.
The meaning "lymph" is denoted by the initial roots chyl- and lymph-
The root chyl- is used if lymph is present in a cavity, in the blood or urine:
chylothōrax, ācis $\mathbf{m}$ - a condition in which there is an effusion of lymph into the thoracic cavity, chylothorax;
chyluria, ae f - a condition in which the urine contains lymph, chyluria.
The root lymph- is used if lymph is considered as a part of lymphatic cells, glands and vessels:
lymphocytōsis, is $\mathbf{f}$ - an increase in the number of lymphocytes present in the blood, lymphocytosis;
lymphadenopahia, ae $\mathbf{f}$ - any morbid condition of the lymph gland, lymphadenopathy;
lymphangiitis, itídis $\mathbf{f}-$ an inflammation of lymphatic vessels, lymphangiitis.

Abnormal presence of blood in a cavity is expressed by the initial root haem- or haemat- which is added to a root and the final suffix - $\overline{\text { ons }}$ as well as any grammar ending of the 1st, 2nd or 3rd declension:
haemarthrōsis, is $\mathbf{f}$ - an extravasation of blood into a joint, haemarthrosis;
haematomētra, ae $\mathbf{f}$ - an accumulation of blood or menstrual fluid in the cavity of uterus, haematometra;
haemotympănum, i n - the presence of blood in the tympanic cavity, haemotympanum.

An abnormal state of blood circulation is mostly caused by embolaemia a condition in which emboli are present in the blood. As a result, there occurs a sudden blocking of a blood vessel, usually an artery, by the emboli fragments of a blood clot, clumps of bacteria or other foreign bodies introduced into the circulation. Such a condition is named thromboembolism (thromboembolismus, i m or thromboembolia, ae f).

An abnormal cessation of the flow of blood, lymph or other physiological fluid is marked by the final root -stăsis:
galactostăsis, is $\mathbf{f}$ - an arrest or stagnation in the secretion of milk, galactostasis;
lymphostăsis, is $\mathbf{f}$ - cessation of the flow of lymph, lymphostasis.
$\S$ 139. Table of initial roots

| Greek roots and their variants | Latin equivalents in dictionary form | English meaning | English word building elements |
| :---: | :---: | :---: | :---: |
| aden- | 1) glandŭla, ae f <br> 2) adenoĭdes, um $f$ <br> 3) nodus lymphatǐcus | 1) gland <br> 2) adenoids <br> 3) lymphatic node | aden- |
| aër-, pneum-, pneumat- | aër, is $m$ | air or a gas | aër-, pneum-, pneumat- |
| chole- | bilis, is f; fel, fellis n | bile | chole- |
| cholecyst- | vesīca biliarris (fellea) | gall bladder | cholecyst- |
| 1) chyl-, <br> 2) lymph- | lympha, ae f | chyle or lymph | chyl-, lymph- |
| col-, -colon | 1) intestīnum crassum <br> 2) colon | 1) large intestine 2) colon | col-, -colon col-, -colon |
| cyst- | 1) saccus, i m <br> 2) vesīca, ae $f$ <br> 3) vesīca urinaria | 1) sac <br> 2) bladder <br> 3) urinary bladder | cyst- |
| dacry- | lacrıma, ae f | tear | dacry- |
| dacryocyst- | saccus lacrimālis | lacrimal sac | dacryocyst- |
| enter- | 1) intestīnum tenue <br> 2) intestīnum | 1) small intestine <br> 2) intestine | enter- |
| galact-, -galactia | lac, lactis n | milk | galact-, -galactia |
| hidr- | sudor, ōris m | sweat | hidr- |


| Greek roots and their variants | Latin equivalents in dictionary form | English meaning | English word building elements |
| :---: | :---: | :---: | :---: |
| hydr- | 1) aqua, ae f <br> 2) liquor cerebrospinālis <br> 3) exsudātum, in <br> 4) transsudātum, i n | 1) water <br> 2) cerebrospinal fluid <br> 3) exudate <br> 4) transudate | hydr- |
| lip-, seb- | 1) adeps, ĭpis m <br> 2) sebum, in | 1) fatty tissue of the body 2) the fatty secretion of the sebaceous glands | lip-, seb- |
| men- | mensis, is m | menses, the monthly discharge of blood from the uterus | men- |
| pan-, pant- | omnis, e | all | pan-, pant- |
| poli- | griseus, a, um | grey | poli- |
| py- | pus, puris n | pus | py- |
| sial-, -sialia | 1) salīva, ae f <br> 2) ductus salivarii | 1) saliva <br> 2) salivary ducts | sial-, -sialia |
| ur-, -uria | 1) urea, ae f <br> 2) urīna, ae f | 1) urea, the chief nitrogenous constituent of urine; 2 ) urine | ur-, -uria |
| xanth- | flavus, a, um | yellow | xanth- |

§ 140. Table of final roots

| Final root elements | English meaning |
| :---: | :--- |
| -chlorhydria | any state of free hydrochloric acid in the gastric juice |
| -chylia | secretion of the gastric juice |
| -menorrhoea | any condition of menses |
| -metra | any condition of the uterus |
| -rrhagia | hemorrhage (bleeding) in any part of the body |
| -rroea | profuse discharge of mucus or other fluid substance |
| -salivatio | secretion of saliva |
| -salpinx | any condition of the uterine tube |
| -stăsis | cessation of the flow of any physiological fluid |
| -thōrax | any condition of the thorax |
| -uria | any condition of the urine |

## § 141. ExERCISES

1. Give the dictionary form of Latin equivalents corresponding to the following Greek roots:
aden-, chole-, col-, cyst-, dacry-, enter-, hidr-, lip-, men-, poli-, py-, xanth-.
2. Give the dictionary form of Latin words and Greek equivalents to the Latin ones:
adeps, aër, aqua, flavus, griseus, lac, lacrǐma, liquor cerebrospinālis, salīva, sudor, vesīca urinaria
3. Complete orally the dictionary form of each Latin noun and define the meaning of each word building element. Write down in English a full definition of each term and its English one-word equivalent:
achlorhydria; adenalgia; adenasthenia; aërobion; amenorrhoea; anaërobion; chylothōrax; cholecystītis; cystorrhagia; dacryostenōsis; empyēma,; enterocolītis; galactorrhoea; haemarthrōsis; hidradenītis; hydromētra; hypochylia; hyposalivatio; lipuria; lymphostăsis; menalgia; megacōlon; pantalgia; polimyelītis; pyogěnus; pyopneumothōrax; pyosalpinx; uraemia; xanthopsia; xanthōsis
4. Make up the Latin dictionary form of one-word terms with the following meaning:
a condition in which the amount of gastric juice is lessened; acute inflammation of the gray matter of the brain; an accumulation of pus in the pericardium; a discharge of pus; a disturbance of color vision when everything appears yellow; an excessive flow of milk; any fluid that has passed through the membrane of the skin; a watery effusion into the cavity of a joint; inflammation in the nail fold; inflammation of the inner mucous membrane of the uterus; inflammation of the liver; narrowing or stricture of the duct of the lacrimal gland; profuse discharge of mucous fluid from the nose; the presence of air or gas within a thorax; the presence of blood in the tympanic cavity; a sudden blocking of a blood vessel, usually an artery, by the emboli; the presence of blood in the urine
5. Give the Latin dictionary form and the full definition of each term in English:
achylia; aerobic; anaerobic; chyluria; colonorrhagia; cystitis; dacryorrhoea; dysmenorrhoea; dropsy; embolaemia; endometritis; enteromegalia; enterogastritis; galactostasis; haematosalpinx; hydrarthrosis; hidrosis; hydrometra; hypersalivation; hypogalactia; lymphangitis; lymphocytosis; menalgia; panaris; paranephritis; pericystitis; pneumonia; pneumohaemothorax; polioencephalopathy; pyuria; thromboembolism; tonsillitis

## § 142. VOCABULARY TO LESSON 22

## Latin-English vocabulary

achlorhydria, ae f - a complete lack of free hydrochloric acid in the gastric juice, achlorhydria
adenalgia, ae f - a painful condition of a gland, adenalgia
adenasthenia, ae f - functional deficiency in a gland, adenasthenia
aërobion, i n - a microorganism which utilizes and assimilates atmospheric oxygen, aerobe (aerobian)
amenorrhoea, ae f - the pathological absence or stoppage of the menstrual discharge from the uterus, amenorrhoea
anaërobion, in - a microorganism which is able to exist and multiply although deprived of either free oxygen or air, anaerobe
chylothōrax, ācis $m$ - the condition in which there is an effusion of the lymph into the thoracic cavity, chylothorax
cholecystītis, itǐdis f - inflammation of the gallbladder, cholecystitis cystorrhagia, ae f - haemorrhage from the urinary bladder, cystorrhagia dacryostenōsis, is $f$ - narrowing or stricture of the duct of the lacrimal gland, dacryostenosis
empyēma, ătis $n$ - an accumulation of pus in a cavity, empyema
enterocolitis, itǐdis f - an inflammed condition of the small intestine and the colon, enterocolitis
galactorrhoea, ae f - an excessive flow of milk, galactorrhoea
haemarthrōsis, osis f - extravasation of blood into a joint, haemarthrosis
hidradenītis, itīdis f - inflammation of the sweat glands, hidradenitis
hydromētra, ae f - an accumulation of watery fluid in the cavity of the uterus, hydrometra
hypochylia, ae f - a condition in which the amount of gastric juice is lessened, hypochylia
hyposalivatio, ōnis f - a condition in which there is an abnormal decrease in the secretion of saliva, hyposalivation
lipuria, ae f - the presence of an oily emulsion or fat in the urine, lipuria
lymphostăsis, is f - cessation of the flow of lymph, lymphostasis
megacōlon, i n - a condition in which there is a great dilatation of the large intestine, megacolon
menalgia, ae f - painful menstruation, menalgia
pantalgia, ae f - pain affecting all parts of the body, pantalgia
polimyelītis, itĩdis f - an acute inflammation of anterior horn cells of the spinal cord due to polioviruses, polimyelitis
pyogĕnus, a, um - forming or producing pus, pyogenic
pyopneumothōrax, ācis m - an inflammatory condition characterized by the presence of purulent fluid and gas in a pleural cavity, pyopneumothorax
pyosalpinx, ngis f - inflammation of the uterine tube which has progressed to pus formation, pyosalpinx
uraemia, ae f - the condition which is associated with the retention of metabolic products in the blood and disturbance of acid-base ratio of the latter, uraemia
xanthopsia, ae f - a disturbance of color vision, when everything appears yellow, xanthopsia
xanthōsis, is $f$ - yellowish discoloration, especially of the skin, xanthosis

## English-Latin vocabulary

achylia, absence of acid and pepsin from the gastric juice - achylia, ae $f$
a condition in which the amount of gastric juice is lessened, hypochylia hypochylia, ae f
acute inflammation of the gray matter of the brain, polioencephalitis polioencephalitis, itǐdis $f$
a discharge of pus, pyorrhea - pyorrhoea, ae f
a disturbance of color vision when everything appears yellow, xanthopsia xanthopsia, ae f
aerobe, a microorganism which utilizes and assimilates atmospheric oxygen aërobion, in
an accumulation of pus in the pericardium, pyopericardium - pyopericardium, in
anaerobe, a microorganism which is able to exist and multiply although deprived of either free oxygen or air - anaërobion, in
aerobic, requiring gaseous oxygen in order to live - aërobĭcus, a, um
anaerobic, able to sustain life without free oxygen - anaërobǐcus, a, um
a narrowing or stricture of the duct of the lacrimal gland, dacryostenosis dacryostenōsis, is f
an excessive flow of milk, galactorrhoea - galactorrhoea, ae f
any fluid that has passed through the membrane of the skin, transudate transudātum, i n
a watery effusion into the cavity of a joint, hydrarthrosis - hydrarthrōsis, is $f$
a sudden blocking of a blood vessel, usually an artery, by emboli, thromboembolia (thromboembolism) - thromboëmbolia, ae f (thromboëmbolismus, i m)
chyluria, the condition in which the urine contains lymph - chyluria, ae f
colonorrhagia, haemorrhage from the colon - colonorrhagia, ae f
cystitis, inflammation of the urinary bladder - cystītis, itĭdis f
dacryorrhoea, an excessive flow of tears - dacryorrhoea, ae $f$
dropsy, an abnormal collection of fluid in tissue or cavity space - hydrops, ōpis m
dysmenorrhoea, pain occurring in the back and lower abdomen at or about the time of menses - dysmenorrhoea, ae f
embolaemia, a condition in which emboli are present in the blood embolaemia, ae f
endometritis, an inflammation of the inner mucous membrane of the uterus endometrītis, itīdis f
enterogastritis, an inflammation of the small intestine and the stomach enterogastrītis, itĭdis f
enteromegalia, an unusually large size of the intestine - enteromegalia, ae f
galactostasis, an arrest or stagnation in the secretion of milk - galactostăsis, is $f$
haematosalalpinx, a collection and retention of blood in an uterine tube haematosalalpinx, ngis f
hidrosis 1) a process of secreting sweat; 2) abnormally profuse sweating hidrōsis, is f
hydrarthrosis, a watery effusion into the cavity of a joint - hydrarthrōsis, is $f$
hydrometra, an accumulation of watery fluid in the cavity of the uterus hydromētra, ae f
hypersalivation, excessive secretion of saliva - hypersalivatio, ōnis f
hypogalactia, secretion of too small a quantity of milk - hypogalactia, ae f
inflammation in the nail fold, panaris - panaritium, in
inflammation of the inner mucous membrane of the uterus, endometritis endometrītis, itĭdis f
inflammation of the liver, hepatitis - hepatītis, itĭdis $f$
lymphangitis, inflammation of lymphatic vessels - lymphangītis, itĭdis $f$
lymphocytosis, an increase in the number of lymphocytes - lymphocytōsis, is $f$ panaris, an inflammation in the nail fold - panaritium, in
paranephritis, an inflammatory condition involving the connective tissue adjacent to the kidney - paranephrītis, itĭdis f
pericystitis, an inflammation in which the structures around the urinary bladder are affected - pericystītis, itĭdis $f$
pneumonia, an inflammation of the spongy tissue of the lung - pneumonia, ae $f$ pneumohaemothorax, an accumulation of gas or air and blood in the cavity of the thorax - pneumohaemothōrax, ācis m
polioencephalopathy, any pathological condition of the gray matter of the brain - polioencephalopathia, ae f
profuse discharge of mucous fluid from the nose, rhinorrhoea - rhinorrhoea, ae f
pyuria, a condition in which pus is present in the urine - pyuria, ae f
the presence of air or gas within a thorax, pneumothorax - pneumothōrax, ācis m
the presence of blood in the tympanic cavity, haemotympanum haemotympănum, i n
the presence of blood in the urine, haematuria - haematuria, ae f
thromboembolism, a sudden blocking of a blood vessel, usually an artery, by emboli - thromboembolismus, i m
tonsillitis, inflammation of the tonsil - tonsillītis, itĭdis $f$

## Lesson 23

ONE-WORD NAMES OF ENDOGENOUS PATHOLOGICAL CHANGES AND MALFORMATIONS

## § 143. NAMES OF ABNORMAL ADHESIONS AND FISSURES

Conditions of abnormal adhesions of tissues are signified by means of the prefix sym- or syn- (before the consonants $\mathbf{d}, \mathbf{p}, \mathbf{t}$ or vowels) and the final roots defining the place of malformation:
symblephăron, in - an adhesion of eyelid to the eyeball, symblepharon
syndactylia, ae fea condition in which two or more fingers or toes are fused, syndactylia.

One-word names of fissures are formed by means of the final root -schĭsis: cystoschissis, is $\mathbf{f}$ - a congenital fissure of the urinary bladder, cystoschisis gnathoschǐsis, is $\mathbf{f}$ - a congenital fissure in the maxilla, gnathoschisis

## § 144. NAMES OF PATHOLOGICAL CAVITIES

Abscesses, cysts and hernias usually belong to pathological cavities.
Abscess (abscessus, us m) is an accumulation of pus circumscribed in a cavity produced by tissue disintegration. This Latin noun is used mainly with adjectives:
abscessus apicalis - apical abscess, an abscess at the apex of the root of a tooth
abscessus tonsillāris - tonsillar abscess, a suppurative condition of the parenchyma of a tonsil.

Cyst (cysta, ae f) is a cavity lined by a well-defined epithelium, fibrous or degenerating tissue. This noun both in Latin and English is mainly used in two-word terms with adjectives and nouns:
cysta choledŏchi - choledochus cyst, cystic dilatation in the common bile duct
cysta pancreatǐca - pancreatic cyst, a cyst arising within or in close proximity to the pancreas.

Hernia (hernia, aef) is the protrusion of an internal organ through a defect in the wall of the anatomical cavity in which it lies. The noun is used like the previous one with adjectives and nouns:
hernia cerĕbri - hernia of the brain, protrusion of the brain through a defect in the skull
hernia inguinālis - inguinal hernia, hernia in the inguinal canal
In one-word terms, the idea of hernia is expressed by the final root -cele:
gastrocēle, es $\mathbf{f}$ - hernia of the stomach, gasrocele
myocēle, es $\mathbf{f}$ - hernia of a muscle, myocele

## § 145. NAMES OF TUMORS

Names of tumors of a definite organ or tissues are formed by means of final suffix - $\mathbf{o m} m$ added to the initial root which indicates the localization of abnormal growth. All these names are nouns of the 3rd declension:
angiōma, ătis $\mathbf{n}$ - angioma, a tumor composed of blood vessels or of lymphatic vessels
nephrōma, ătis n - nephroma, a tumor derived from renal substance
osseōma, ătis n- osseoma, a tumor of bone.
Some names of innocent tumors are formed without the suffix -oma:
poly̆pus, i m polypus, a tumor with a stalk arising from mucous membranes or the body surface
verrūca, ae f-a wart, a small circumscribed epidermal tumor.
Both nouns are used in multiword terms:
poly̆pus laryngis - a polypus of larynx
verrūca plana - a plane wart.
A malignant tumor or any malignant growth is named cancer - cancer, cri m . This name is used with the nouns and adjectives which define localization of the tumor:
cancer cutis - cancer of the skin
cancer gastris - cancer of the stomach
cancer osteolyticus - osteolytic cancer, a cancer which destroys the bone that it has invaded.

A malignant epithelial tumor is called carcinoma - carcinōma, ătis n. This noun is used with adjectives mostly:
carcinōma bronchogenĭcum - a bronchogenic carcinoma, carcinoma originating from a bronchus
carcinōma cutaneum - carcinoma cutaneum, a squamous-celled carcinoma of the skin.

The name carcinoma can also be used as a final root of one-word terms:
adenocarcinōma, ătis $\mathbf{n}$ - a carcinomatous tumor of glandular epithelium and connective tissue, adenocarcinoma
chondrocarcinōma, ătis $\mathbf{n}$ - a carcinoma the fragment of which contains cartilaginous elements, chondrocarcinoma.

## § 146. NAMES OF CONCREMENTS

A concrement is a pathological concretion - mostly a small mass which has become calcified in a cavity or in the tissue of a hollow anatomical structure. Such a concretion is denoted in Latin by the nouns concrementum, in or calcŭlus, $\mathbf{i} \mathbf{~ m}$ and an adjective defining the localization of the concretion:
concrementum nasāle - nasal calculus
calcŭlus dentālis - dental calculus
The names of these concretions may also be expressed by one-word terms by means of the final root -lithus (Greek lithos stone) added to initial roots: rhinolĭthus, i $\mathrm{m}=$ concrementum nasāle
odontolĭthus, i $\mathrm{m}=$ calcŭlus dentālis.
The condition in which a number of calculi are present in any part of the body is called calculosis - calculōsis, is $\mathbf{f}$. The formation of concretions is named lithiasis - lithiăsis, is $\mathbf{f}$. The same word is used as a final root of several one-word terms:
broncholithiăsis, is $\mathbf{f}$ - a condition in which calculi occur in the lumina of bronchial tubes, broncholithiasis
cholecystolithiăsis, is $\mathbf{f}$ - a condition in which there are gall-stones in the gall bladder or bile duct, cholelithiasis
nephrolithăsis, is $\mathbf{f}$ - a condition characterized by the presence of gravel or of renal calculi, nephrolithiasis
urolithiăsis, is $\mathbf{f}$ - a morbid state due to the presence of calculi in the urinary system, urolithiasis

## § 147. NAMES OF ABNORMAL HARDENING AND SOFTENING OF TISSUES

Abnormal hardening (induration) of a tissue is expressed by the initial root scler- (Greek skleros hard) or the final element -sclerosis:
sclerodesmia, ae f-abnormal induration of ligaments, sclerodesmia
osteosclerōsis, is $\mathbf{f}$ - hardening of bony spaces, osteosclerosis
Abnormal softening of a tissue is expressed by the final root -malacia (Greek malakia softness):
chondromalacia, ae $\mathbf{f}$ - a pathological softening of a cartilage, chondromalacia
§ 148. TABLE OF INITIAL ROOTS

| Greek roots <br> and their <br> variants | Latin equivalents in dictionary <br> form | English meaning | English word <br> building <br> elements |
| :---: | :---: | :---: | :---: |
| carcin- | cancer, cri m | cancer | carcin- |
| hist- | textus, us m | tissue | hist- |
| lith- | calcŭlus, i m <br> concrementum, i n | stone <br> concretion | lith- |
| mening- | pia mater, arachnoidea mater, dura <br> mater - the membranes which <br> form the covering or sheaths of the <br> spinal cord and brain | pia mater, <br> arachnoidea mater, <br> dura mater | mening- |

Attention! Instead of the initial Greek root uran- the Latin root palat- can be used:
palatoplegia, ae f (palatoplegia, paralysis affecting the soft palate) $=$ uranoplegia, ae $f$ (uranoplegia)
palatoschissis, is f (palatoschisis, cleft palate, a congenital fissure in the midline of the hard palate) $=$ uranoschissis, is f (uranoschisis)
§ 149. Table of final roots

| Final root elements | English meaning |
| :---: | :--- |
| -carcinōma | a malignant epithelial tumor |
| -cele | hernia |
| -lithiăsis | the formation of concretions |
| -lĭthus | a concretion |
| -malacia | pathological softening of an organ or tissue |
| -morphōsis | any state of the body form |
| -necrōsis | death of a portion of a tissue |
| -onychia | any abnormal condition of the nail |
| -porōsis | abnormal rarefaction of a bone by thinning of its trabeculae |
| -schĭsis | congenial fissure of a tissue |
| -sclerōsis | hardening of a tissue |
| -stenōsis | the constriction or narrowing of an orifice or the lumen of a hollow <br> or tubular organ |

## § 150. ExERCISES

1. Give the dictionary form of Latin equivalents corresponding to the following Greek roots:
carcin-, hist-, lith-, mening-, morph-, necr-, ne(o)-, onc-, onych-, pachy-, scler-, typhl-.
2. Give the dictionary form of Latin words and Greek equivalents to the Latin ones:
caecum, calcǔlus, cancer, crassus, durus, mortuus, palātum, pelvis renālis, strictus, textus, viscerra.
3. Complete orally the dictionary form of each Latin noun and define the meaning of each word building element. Write down in Englisha a full definition of each term and its English one-word equivalent:
adenocarcinōma; broncholithiăsis; carcinomatōsis; cystoschǐsis; dacryostenōsis; gastrocēle; histoly̆sis; meningiōma; metamorphōsis; micronychia; myocēle; necropneumonia; nephrolithiăsis; neoplasma; odontolĭthus; oncolŏgus; onychomycōsis; osteonecrōsis; osteoporōsis; pachydactylia; palatoplegia; pyelītis; sarcōma; sclerōma; splanchnosclerōsis; spondylītis; stenothōrax; typhlectasia; uranoschǐsis
4. Make up the Latin dictionary form of one-word terms with the following meaning:
abnormal narrowing of the internal diameter of a vessel; a carcinoma the fragment of which contains cartilaginous elements; any diseased condition of the viscera; calculus on the teeth; causing the growth of tumors; congenital cleft
of a vertebral arch or arches; congenital fissure of the urinary bladder; hardening of bony spaces; herniation of the uterus; inflammation affecting the pelvis of the kidney and the urinary bladder; inflammation of the membranes of the brain or spinal cord; paralysis affecting the soft palate; pathological softening of a cartilage; separation of a tissue as a result of its death; spasm of the caecum; the formation of concretions; the origin, formation and development of body tissue; the production and evolution of a form; the production of urinary calculi and the morbid state due to the presence of calculi in the urinary system
5. Give the Latin dictionary form and the full definition of each term in English:
adiponecrosis; angioma; calculosis; cancerogenic (=carcinogenic); carcinoma; cholecystolithiasis; chondroporosis; enterolithiasis; gnathoschisis; macronychia; meningoencephalitis; necraemia; neoarthrosis; oesophagostenosis; oncologist; oncotherapy; onychodystrophy; osteomalacia; pachycheilia; polyposis; rhinolith; sarcomatosis; sclerodermatitis; sialolith; spondylopathy; symblepharon; synphalangism; typhlocele

## § 151. VOCABULARY TO LESSON 23

## Latin-English vocabulary

adenocarcinōma, ătis $n$ - a carcinomatous tumor of glandular epithelium and connective tissue, adenocarcinoma
broncholithiăsis, is f - a condition in which calculi occur in the lumina of bronchial tubes, broncholithiasis
carcinomatōsis, is f - a condition in which carcinoma is widely distributed throughout the body, carcinomatosis
cystoschĭsis, is f - a congenital fissure of the urinary bladder, cystoschisis
dacryostenōsis, is f - a narrowing or stricture of the duct of the lacrimal gland, dacryostenosis
gastrocēle, es $f$ - a hernia of the stomach or of a portion which has become pouched, gastrocele
histoly̆sis, is f - a spontaneous dissolution of living organic tissue, histolysis
meningiōma, ătis $n$ - a meningeal tumor, thought to arise from the arachnoidal villi, meningioma
metamorphōsis, is f - a change of a form or structure, metamorphosis
micronychia, ae f - a small nail or small nails, micronychia
myocēle, es $f$ - hernia of a muscle, myocele
necropneumonia, ae f - gangrene of the lung, necropneumonia
nephrolithiăsis, is f - a condition characterized by the presence of gravel or renal calculi, nephrolithiasis
neoplasma, ătis $n$ - any new and morbid formation of tissue, neoplasm
odonthlĭthus, im - a calculus on the teeth, odontolith
oncolŏgus, i m - a specialist treating tumors, oncologist
onychomycōsis, is f - an infection of nails caused by a fungus, onychomycosis osteonecrōsis, is f - death of bony tissue, osteonecrōsis
osteoporōsis, is f - a rarefaction of bone, osteoporosis
pachydactylia, ae f - abnormal thickening of a finger or toe, pachydactyly palatoplegia, ae f - paralysis affecting the soft palate, palatoplegia
pyelītis, itĭdis $f$ - an inflammation of the pelvis of the kidney, pyelitis
sarcōma, ătis $n$ - a malignant tumor of connective tissue or its derivatives, sarcoma
sclerōma, ătis $n-$ an area of indurated tissue, particularly in the mucous membrane of the nose or larynx, scleroma
splanchnosclerōsis, is f - hardening of any viscus, splanchnosclerosis
spondylītis, itĭdis f - an inflammation of the spine, spondilitis
stenothōrax, ācis m - a short, narrow thorax or chest, stenothorax
typhlectasia, ae f - a dilatation of the caecum, typhlectasia
uranoschǐsis, is f - cleft palate, a congenital fissure in the midline of the hard palate, uranoschisis

## English-Latin vocabulary

a calculus on the teeth, odontolith - odontolĭthus, i m
a carcinoma the fragment of which contains cartilaginous elements, chondroma - chondrōma, ătis n
a carcinomatous tumor of glandular epithelium and connective tissue, adenocarcinoma - adenocarcinōma, ătis n
a condition characterized by the presence of gravel or of renal calculi, nephrolithiasis - nephrolithiăsis, is f
a congenital cleft of a vertebral arch, spondyloschisis - spondyloschĭsis, is f a congenital fissure of the urinary bladder, cystoschisis - cystoschĭsis, is f adiponecrosis, necrosis affecting the fatty tissue of the body - adiponecrōsis, is $f$ a malignant tumor of connective tissue or its derivatives, sarcoma - sarcōma, ătis $n$
a meningeal tumor thought to arise from the arachnoidal villi, meningioma meningiōma, ătis n
an abnormal thickening of a finger or toe, pachydactyly - pachydactylia, ae f angioma, a tumor composed of blood vessels or lymphatic vessels - angiōma, ătis, $n$
any diseased condition of the viscera, splanchnopathy - splanchnopathia, ae $f$ a separation of a tissue as a result of its death, necrolysis - necroly̆sis, is $f$ calculosis, a condition in which a number of calculi are present in any part of the body - calculōsis, is f
cancerogenic (=carcinogenic), producing carcinoma - cancerogěnus, a, um carcinoma, a malignant epithelial tumor - carcinōma, ătis n causing the growth of tumors, oncogenous - oncogĕnus, a, um
cholecystolithiasis, a condition in which there are gall-stones in the gall bladder or bile duct - cholecystolithiăsis, is f
chondroporosis, a porous condition of cartilage shown in thinning of the cartilage and formation of spaces and sinuses - chondroporōsis, is f
enterolithiasis, formation of calculi or concretions in the intestine entherolithiăsis, is f
gnathoschisis, a congenital fissure in the maxilla - gnathoschǐsis, is f
hardening of bony spaces, osteosclerosis - osteosclerōsis, is $f$
herniation of the uterus, metrocele - metrocēle, es f
inflammation affecting the pelvis of the kidney and the urinary bladder, pyelocystitis - pyelocystītis, itĭdis f
inflammation of the membranes of the brain or spinal cord, meningitis meningītis, itĭdis f
macronychia, escessive length or size of the nails - macronychia, ae f
meningoencephalitis, an inflammatory condition of the brain and its meninges meningoencephalitis, itĭdis f
necraemia, a condition in which the blood loses its vitality - necraemia, ae f
neoarthrosis, an artificial joint implanted by the surgical operation neoarthrōsis, is f
oesophagostenosis, a narrowing of the oesophagus - oesophagostenōsis, is $f$
oncologist, a specialist treating tumorous diseases - oncolŏgus, i m
oncotherapy, the treatment of tumours - oncotherapia, ae f
onychodystrophy, malformation of the nails due to impaired nutrition onychodystrophia, ae f
osteomalacia, softening of the bones - osteomalacia, ae f
pachycheilia, abnormal thickness or swelling of the lips - pachycheilia, ae f
paralysis affecting the soft palate, palatoplegia - palatoplegia, ae f
pathological softening of cartilage, chondromalacia - chondromalacia, ae f
polyposis, a condition in which the colon is studded with polypi growing from the mucous membrane - polypōsis, 1s f
production of urinary calculi and a morbid state due to the presence of calculi in the urinary system, urolithiasis - urolithiăsis, is f
rhinolith, a concretion in the cavity of the nose - rhinolĭthus, im
sarcomatosis, a condition in which a number of sarcomata develop here and there on the body surface - sarcomatōsis, is $f$
sclerodermatitis, an inflammation and induration of the skin - sclerodermatītis, itīdis f
sialolith, a salivary calculus - sialolĭthus, i m
spasm of the caecum, typhlospasm - typhlospasmus, i m
spondylopathy, any disease of the vertebrae - spondylopathia, ae f
symblepharon, adhesion of the eyelid to the eyeball - symblephăron, in
synphalangism, a condition in which the joints of certain fingers or toes are fused - synphalangismus, i m the formation of concretions, lithiasis - lithiăsis, is $f$
the origin, formation and development of body tissue, histogenesis histogeněsis, is $f$
the production and evolution of a form, morphogenesis - morphogeněsis, is f typhlocele, a hernia involving the caecum - typhlocēle, es f

## Lesson 24

## NAMES OF DEFORMATIONS OF TISSUE CAUSED BY EXOGENOUS FACTORS. NAMES OF SURGICAL OPERATIONS

## § 152. GENERAL NAMES OF TISSUE DEFORMATIONS CAUSED BY DIFFERENT EXOGENOUS FACTORS

The most known general names of tissue deformations are the following one-word terms:
deformatio, $\overline{\text { onis }} \mathbf{f}$ - a destruction of the form, deformation
laesio, ōnis f - an injury, damage suffered by the body
trauma, ătis n-a trauma, injury
vulnus, ĕris $\mathbf{n}$ - a wound, any interruption by violence or by surgery, in the continuity of the external surface of the body or of the surface of any internal organ

More definite names are the following one-word terms:
avulsio, $\overline{\text { onnis }} \mathbf{f}$ - avulsion, a forcible removal of a portion from a hollow structure
combustio, ōnis $\mathbf{f}$ - burn, an injury caused by heat or by chemical or physical agents having an effect similar to heat
congelatio, ōnis $\mathbf{f}$ - congelation, frostbite, a local morbid condition, caused by freezing
commotio, $\overline{\text { onis }} \mathbf{f}$ - a concussion or a violent shaking of a soft structure
compressio, $\overline{\text { onis }} \mathbf{f}$ - compression, the process of decreasing the volume and increasing the density of the body by means of force applied externally
dislocatio, $\overline{\text { onis }} \mathbf{f}$ - a dislocation, an abnormal displacement of one bone upon another in a joint
ectopia, ae $\mathbf{f}$ - ectopia, a morbid congenital malposition or traumatic displacement of an organ or its part
fractūra, ae $\mathbf{f}$ - a fracture, a break in the continuity of a bone
luxatio, $\overline{\text { onis }} \mathbf{f}$ - a luxation, a dislocation of a bone
ruptūra, ae $\mathbf{f}$ - a rupture, the breaking or forcible disruption of continuity of the bone or anther anatomical structure. With the same meaning, but only in one-word terms, the final root -rrhexis (Greek rhexis a break) is used:
metrorrhexis, is $\mathbf{f}$ - metrorrhexis, rupture of the uterus
ophthalmorrhexis, is $\mathbf{f}$ - ophthalmorrhexis, rupture of the eyeball
prolapsus, us $\mathbf{m}$ - prolapse, a sinking down or protrusion of a viscus or its part. With the same meaning the final root -ptōsis is used:
gastroptōsis, is $\mathbf{f}$-gasroptosis, a downward displacement of the stomach
splenoptōsis, is $\mathbf{f}$ - splenoptosis, a prolapse of the spleen

## § 153. NAMES OF SURGICAL OPERATIONS

The most common names of surgical operations are the following:
operatio, $\overline{\text { onis }} \mathbf{f}$ - an operation, surgical intervention upon a part of the body
amputatio, $\overline{\text { onis }} \mathbf{f}$ - an amputation, the surgical removal of a limb or a portion of a limb or of any other appendage
extirpatio, ōnis $\mathbf{f}$ - an extirpation, a removal of the entire pathological structure, organ or part
extractio, $\overline{\text { onis }} \mathbf{f}$ - an extraction, the act or process of drawing out a part of body or a foreign body
implantatio, ōnis $\mathbf{f}$ - an implantation, the introduction of one tissue or structure into another with the aim of improving the function of any part of the body
punctūra, ae f (punctio, ōnis f) - a puncture, the operation of piercing a viscus or a swelling either to establish the nature of its content or to empty it. In one-word terms, the final root -centēsis corresponds to the two-word terms which include the noun puncture and the second noun signifying the site of this operation, e. g.:
punctūra thorācis $=$ thoracocentēsis punctūra pulmōnis $=$ pneumocentēsis
replantatio, $\overline{\text { onis }} \mathbf{f}$ - replantation, the replacement a separated by accident part of some anatomical stucture back to its natural place.
transplantatio, $\overline{\text { onnis }} \mathbf{f}$ - a transplantation, the operation of transference of a tissue or an organ from one place to an other with the aim of improving or renewing the function
resectio, $\overline{\text { onis }} \mathbf{f}$ - a resection, a surgical removal of a part, usually of some magnitude, e. g. jaw, stomach, colon etc.
sectio, $\overline{\text { onnis }} \mathbf{f}$ - a section, the act of cutting
§ 154. Prefixes widely used in Surgical names

| Latin <br> prefix | Meaning | Latin example | English equivalent and its meaning |
| :---: | :---: | :---: | :--- |
| a-, ab- | away, from | avulsio, ōnis f | avulsion, the forcible removing a portion from <br> a hollow structure <br> aberration, a deviation from the normal |
| de(s)- | away, from | decapsulatio, ōnnis f <br> descensus, us m | decapsulation, surgical removal of a capsule or <br> sheath <br> descent, the sinking down or protrusion of <br> a viscus or its part |


| Latin <br> prefix | Meaning | Latin example | English equivalent and its meaning |
| :---: | :---: | :---: | :--- |
| dis- | apart, <br> separation | disarticulatio, ōnis f | disarticulation, separation or amputation in <br> a joint without cutting through bone |
| im-, | in, into | implantātum, i n <br> invasio, ōnis f | implant, any piece of tissue for use as a graft <br> invasion, the entrance and establishment of <br> parasites into the body of a host |
| e-, ex- | from, <br> out of | extractio, ōnis f | extraction, the act or process of drawing out <br> a part of body or a foreign body <br> evisceration, removal of the contents of an <br> organ or its part |
| re- | again | replantatio, ōnis f | replantation, the replacement a separated by <br> accident part of some anatomical stucture back <br> to its natural place |
| trans- | through, <br> across | transplantatio, ōnis f | transplantation, the operation of transfer of <br> tissue from one site to another |

$\S$ 155. Table of initial roots

| Greek roots and their variants | Latin equivalents in dictionary form | English meaning | English word building elements |
| :---: | :---: | :---: | :---: |
| blephar- | palpěbra, ae f | eyelid | blephar- |
| chir- | manus, us f | hand | chir- |
| colp- | vagīna, ae f | vagina | colp- |
| cry- | gelu, us n | cold | cry- |
| crypt- | latens, ntis | hidden | crypt- |
| desm- | ligamentum, in | ligament | desm- |
| embry- | 1) embryo, ōnis m <br> 2) fetus, us m | 1) embryo, a living organism from the fertilized ovum to the first 8 weeks of intrauterine life <br> 2) fetus, a living organism after first 8 weeks of intrauterine life | embry- |
| kerat- | cornea, ae f | 1) cornea <br> 2) the horny layer of the skin | kerat- |
| lapar- | abdōmen, ĭnis n | abdomen | lapar- |
| pneum-, pneumon- | pulmo, ōnis m | lung | pneum-, pneumon- |
| salping- | 1) tuba uterīna <br> 2) tuba auditīva <br> (=tuba auditoria) | 1) the uterine tube <br> 2) the pharyngotympanic tube <br> (=auditory tube) | salping- |
| ten- | tendo, ǐnis m | tendon | ten- |
| top- | locus, i m | place | top- |

§ 156. TABLE OF FINAL ROOTS

| Final roots elements | English meaning |
| :---: | :---: |
| -chirurgia | surgical operation |
| -centēsis | tapping or puncture of a cavity, -centesis |
| -děsis | operative fixation of a structure, -desis |
| -ectomia | amputation or excision of an organ or its part, -ectomy |
| -implantatio | the introduction of one tissue or structure into another with the aim of improving the function of any part of the body, -implantation |
| -lysis | surgical freeing of a tissue from adhesions |
| -pexia | surgical fixation by means of sutures, -pexis, -pexy |
| -plastǐca | an operation dependent upon the transposition of skin or other tissue, -plasty |
| -rrhaphia | the suturing together of the cut or torn edges of a wound, -rrhaphy |
| -rrhexis | rupture or bursting of an organ or vessel, -rhexis |
| -stǒma | an artificial opening created by surgical operation |
| -stomia | creation of an artificial opening, -stomy |
| -tomia | operative cutting, incision or section, -tomy |
| -transplantatio | the operation of transference of a tissue or an organ from one place to an other with the aim of improving or renewing the function, -transplantation |

## § 157. EXERCISES

1. Give the dictionary form of Latin equivalents corresponding to the following Greek roots:
blephar-, chir-, colp-, cry-, crypt-, desm-, embry-, kerat-, lapar-, pneum-, salping-, ten-, top-.
2. Give the dictionary form of Latin words and Greek equivalents to the Latin ones:
abdōmen, cornea, embryo, gelu, latens, locus, manus, palpěbra, pulmo, tendo, tuba uterīna.
3. Complete orally the dictionary form of each Latin noun and define the meaning of each word building element. Write down in English the full definition of each term and its English one-word equivalent:
avulsio; blepharītis; blepharoplastĭca; colpotomia; combustio; cryochirurgia; cryotherapia; cryptophthalmia; decapsulatio; descensus; desmorrhexis; desmurgia; disarticulatio; embryologia; embryotomia; evisceratio; gastrostŏma; hyperkeratōsis; implantatio; implantātum; keratotomia; laparoscopia; laparogastrostomia; pneumocentēsis; prolapsus; pneumoëmpyēma; replantatio; resectio; salpingectomia; salpingoly̆sis; spondyloděsis; tenorrhaphia; tenotomia; thoracocentēsis; toponeurōsis
4. Make up the Latin dictionary form of one-word terms with the following meaning:
a concussion or a violent shaking of a soft structure; adenoma of the eyelid; a medical practitioner skilled in general surgery, who specializes in the operative
treatment of diseases of the nervous system; a neoplasm originating in embryonic elements or blighted ovum; any disease affecting ligaments; any morbid condition affecting the lungs; any plastic operation to repair or reconstruct the urinary bladder; any plastic surgical operation on the vagina; a tumor consisting of connective-tissue element; incision of the abdominal wall and excision of the uterus; inflammation of abdominal muscles; inflammation of the cornea; polypus of the vagina; puncture of the cornea; removal of an entire pathological structure, organ or part; retention of the menstrual flow due to congenital acquired genital-canal stenosis; surgical operation on small structures with the aid of a microscope; the act or process of drawing out a part of body or a foreign body; the entrance and establishment of parasites into the body of a host; the operation for the relief of hernia and the resultant reduction of the size of the latter; the operation of removal of the adenoid growth by excision; the operation of transference of a tissue of an organ from one place to an other with the aim of improving or renewing a function; the surgical establishment of a permanent or semipermanent opening into the urinary bladder; total or partial surgical removal of diseased lung tissue; use of cold or freezing as a therapeutic measure
5. Give the full definition of each term and its Latin dictionary form: arthrocentesis; autoplasty; blepharotomy; colpocystotomy; colpomyomectomy; colpohysteropexy; congelation; cryosurgery; cryptolith; cryptopsoriasis; desmalgia; desmotomy; dislocation; ectopia; embryectomy; embryopathology; implant; implantation; keratomycosis; keratoplasty; oesophagostoma; pneumorrhaphy; pneumotomy; puncture; salpingogram; salpingopexy; tenodesis; tenolysis; tonsillotomy; topography; topophobia

## § 158. Vocabulary to lesson 24

## Latin-English vocabulary

avulsio, ōnis f - a forcible removing a portion from a hollow structure, avulsion
blepharītis, itīdis f - an inflammation of the eyelids, blepharitis
blepharoplasticca, ae f - a plastic operation for restoration of an eyelid or any part of it, blepharoplasty
colpotomia, ae f - any cutting operation on the vagina, colpotomy
combustio, ōnis f-an injury caused by heat or by chemical or physical agents having an effect similar to heat, burn
cryochirurgia, ae f - surgical procedures in which tissue is destroyed by freezing, cryosurgery
cryotherapia, ae f - the science of the use of cold as a therapeutic measure, cryotherapy
cryptophthalmia, ae f - a congenital adhesion of the eyelids so that the eyeballs can not be seen, cryptophthalmia
decapsulatio, ōnis $f$ - a surgical removal of a capsule or sheath, decapsulation descensus, us $m$ - the sinking down or protrusion of a viscus or its part, descent desmorrhexis, is f - rupture of a ligament, desmorrhexis
desmurgia, ae f - the science of applying ligatures or bandages to a part, desmurgy
disarticulatio, ōnis f - a separation or amputation at a joint, without cutting through bone, disarticulation
embryologia, ae f - a branch of biological science which is concerned with the origin and development of the embryo from the ovum to the stage of extra-uterine life, embryology
embryotomia, ae f - a dissection of an embryo or fetus, embryotomy
evisceratio, ōnis f - a removal of the contents of an organ or part, evisceration
gastrostŏma, ătis n-a natural or artificial gastric fistula, gastrostoma
hyperkeratōsis, is f - a hypertrophy of the stratum corneum of the skin, hyperkeratosis
implantatio, ōnis f - the introduction of one tissue or structure into another with the aim of improving the function of any part of the body, implantation
keratotomia, ae f - making an incision into the cornea, keratotomy
laparoscopia, ae f - the act or process of examining the peritoneal cavity and its contents by means of a laparoscope, laparoscopy
laparogastrostomia, ae f - the operation to create an artificial opening in the stomach, laparogastrostomy
pneumocentēsis, is f - a lung puncture in order to aspirate the contents of a cavity, pneumocentesis
pneumoëmpyēma, ătis n - the presence of pus and gas within the pleural space, pneumoëmpyema
prolapsus, us $m$ - the sinking down or protrusion of a viscus or its part, prolapse
replantatio, ōnis f - the replacement a separated by accident part of some anatomical stucture back to its natural place, a replantation
resectio, ōnis $f$ - a surgical removal of a part, usually of some magnitude, e. g. jaw, stomach, etc., a resection
salpingectomia, ae f - an excision of an uterine tube, salpingectomy
salpingoly̆sis, is f - breaking-down of adhesions in an uterine tube, salpingolysis
spondyloděsis, is $f$ - the operation of fusion of the spine, usually by a bone graft, spondylodesis
tenorrhaphia, ae f - an operation for the suturing of the divided ends of a tendon, tenorrhaphy
tenotomia, ae f - the cutting of a tendon, tenotomy
thoracocentēsis, is f - a puncture of the wall of the thorax to remove fluid, thoracocenthesis
toponeurōsis, is f - localized neurosis, a functional derangement in any part of the body, toponeurosis

## English-Latin vocabulary

a concussion or a violent shaking of a soft structure - commotio, ōnis $f$
adenoma of the eyelid, blepharoadenoma - blepharoadenōma, ătis n a medical practitioner skilled in general surgery who specializes in the operative treatment of diseases of the nervous system, a neurosurgeon neurochirurgus, im
a neoplasm originating in embryonic elements or blighted ovum, an embryoneoplasm - embryoneoplasma, ătis n
any disease affecting the ligaments, desmopathia - desmopathia, ae f
any morbid condition affecting the lungs, pneumopathy - pneumopathia, ae f
any plastic operation to repair or reconstruct the urinary bladder, cystoplasty cystoplastǐca, ae f
any plastic surgical operation on the vagina, colpoplasty - colpoplastica, ae f a polypus of the vagina, colpopolypus - colpopoly̆pus, i m
a prolapse, the sinking down or protrusion of a viscus or its part - prolapsus, us $m$
a puncture of the cornea, keratocentesis - keratocentēsis, is $f$
arthrocentesis, the surgical procedure of puncturing a joint - arthrocentēsis, is $f$
a surgical operation on small structures with the aid of a microscope, microsurgery - microchirurgia, ae f
a tumor consisting of connective tissue, desmoneoplasm - desmoneoplasma, ătis n
autoplasty, the repair of a diseased or injured tissue or organ by the material taken from another part of the body - autoplasticca, ae f
blepharotomy, an incision of an eyelid - blepharotomia, ae f
colpocystotomy, a surgical incision into the urinary bladder through the wall of the vagina - colpocystotomia, ae f
colpohysteropexy, the operative fixation of the uterus through the vagina colpohysteropexia, ae f
colpomyomectomy, a removal of a myoma from the uterus by the vaginal route - colpomyomectomia, ae f
congelation, frostbite, a local morbid condition, caused by freezing congelatio, ōnis f
cryosurgery, surgical procedures in which tissue is destroyed by freezing cryochirurgia, ae f
cryptolith, a calculus contained in a crypt - cryptolithus, i m cryptopsoriasis, hidden, latent psoriasis - cryptopsoriăsis, is f
desmalgia, pain in a ligament - desmalgia, ae $f$
dislocation, abnormal displacement of one bone upon another in a joint dislocatio, ōnis f
ectopia, a morbid congenital malposition or traumatic displacement of an organ or its part - ectopia, ae f
embryectomy, the surgical removal of the embryo - embryectomia, ae f
embryopathology, the branch of pathology concerned with defective or abnormal development of embryo - embryopathologia, ae f
implant, any piece of tissue used as a graft - implantātum, in
incision of the abdominal wall and excision of the uterus, laparohysteroectomy laparohysteroectomia, ae f
inflammation of the abdominal muscles, laparomyositis - laparomyosītis, itĭdis f
keratomycosis, a disease of cornea caused by a fungus - keratomycōsis, is $f$
keratoplasty, plastic surgery on the cornea - keratoplastĭca, ae f
oesophagostoma, any opening into the esophagus apart from the normal entrance and exit - oesophagostǒma, ătis n
ophthalmorrhexis, rupture of the eyeball - ophthalmorrhexis, is $f$
pneumocentesis, a lung puncture in order to aspirate the contents of the cavity pneumocentēsis, is $f$
pneumoempyema, the presence of pus and gas within the pleural space pneumoëmpyēma, ătis n
pneumorrhaphy, the operation of suturing a wound of the lung pneumorrhaphia, ae f
pneumotomy, making an incision into the lung - pneumotomia, ae f
puncture, the operation of piercing a viscus or a swelling either to establish the nature of its content or to empty it - punctūra, ae f; punctio, ōnis f
removal of an entire pathological structure, organ or part, amputation amputatio, ōnis f
retention of the menstrual flow due to congenital or acquired genital canal stenosis, cryptomenorrrhoea - cryptomenorrrhoea, ae f
removal of an entire pathological structure, an organ or part, extirpation extirpatio, ōnis f
salpingogram, the radiograph made during the radiographic visualization of the uterus and uterine tubes - salpingogramma, ătis n
salpingopexy, surgical fixation of the uterine tube - salpingopexia, ae f
tenodesis, operative fixation of a tendon - tenoděsis, is $f$
tenolysis, the freeing of a tendon from adhesions - tenoly̆sis, is $f$
the act or process of drawing out a part of body or a foreign body, extraction extractio, ōnis f
the entrance and establishment of parasites into the body of a host, invasion invasio, ōnis f
the introduction of one tissue or structure into another with the aim of improving the function of any part of the body - implantatio, $\bar{o} n i s f$
the operation for the relief of hernia and the resultant reduction of the latter, herniotomia - herniotomia, ae f
the operation of removal of the adenoid growth by excision, adenotomy adenotomia, ae f
the operation of transference of a tissue of an organ from one place to an other with the aim of improving or renewing of a function, transplantation transplantatio, ōnis f
the surgical establishment of a permanent or semipermanent opening into the urinary bladder, cystostomy - cystostomia, se f
tonsillotomy, the surgical operation for removal of a part of a tonsil tonsillotomia, ae f
topography, the anatomical description of any particular part of the body topographia, ae f
topophobia, unreasoned fear of certain places - topophobia, ae f
total or partial surgical removal of diseased lung tissue, pneumonectomy pneumonectomia, ae f
use of cold or freezing as a therapeutic measure, cryotherapy - cryotherapia, ae f

## Lesson 25

MULTIWORD CLINICAL TERMS. PART № 1

## § 159. THE STRUCTURE AND VOCABULARY OF MULTIWORD CLINICAL TERMS

Multiword terms are widely used in medical diagnoses. Any multiword term consists, as a rule, of two or three words. The noun containing the cardinal information of the term is placed first, and then one or two nouns or one or two adjectives follow. The second and third nouns indicate the localization of the diseased organ or tissue; adjectives give qualitative and quantitative characteristics of the morbid condition:
infarctus cerěbri - cerebral infarct, an infarct of cerebral tissue due to failure of blood supply resulting from vascular thrombosis, embolism or spasm
tachycardia ventricŭli sinistri - tachycardia of the left ventricle, abnormally rapid rate of the left ventricle
anaemia haemorrhagĭca - haemorrhagic anaemia, anaemia caused by acute or chronic loss of blood because of whatever cause
myocardītis bacterialis acuta - acute bacterial myocarditis, acute inflammation of the myocardium due to invasion of bacteria

The combination of a noun and an adjective after the first noun of the term can be present too:
cirrhōsis biliāris infantium - biliary cirrhosis of children, cirrhosis of young children due to congenital anomalies of the bile ducts
luxatio coxae congenita - congenital dislocation of the hip
To sum up, we can say that multiword clinical terms are built similar to anatomical ones. First of all, the dictionary form of every word should be given. After that, the term is built according to the already known rules.

## § 160. ExERCISES

1. Give the dictionary form of every word and the full definition of the italicized words; translate the multiword terms into English:
abdōmen acūtum; diabētes mellītus; diagnōsis aetiologǐca; febris continua; fetor ex ore sive halitōsis; herpes labiālis; indigestio gastris; infarctus thrombotǐcus; insufficientia renālis chronǐca; morbus maculōsus neonatōrum; palpatio et percussio hepătis; polyuria diabetĩca; prophylaxis morbōrum allergicōrum; syndrŏmum unguium flavōrum; toxicōses gravidārum; vitium cordis congenĭtum
2. Give the dictionary form of every word and the full definition of the italicized words; translate the multiword terms into Latin:
acute suppurative bronchitis; allergic stomatitis; cardinal symptoms; cerebrospinal hereditary paralysis; chronic superficial dermatitis; collapse of the lung; endogenous eczema; exogenous tuberculosis; hypoglycaemic coma; intermittent hepatic fever, plasma transfusion; primary atypical pneumonia; simple urethritis; spongiform subacute encephalopathy; syndrome of the cerebral peduncle; tissue emphysema; ultrasonic tomography

## § 161. Vocabulary to lesson 25

Latin-English vocabulary
acūtus, a, um - acute
aetiologicus, a, um - aetiologic, based on the aetiology - the science of
the investigation of the cause or origin of any phenomenon
chronǐcus, a, um - chronic, long continued
congenĭtus, a, um - congenital
continuus, a, um - continued
diabētes, ae m - diabetes, a group of diseases in which there is polyuria and a disturbed metabolism
diabetǐcus, a, um - diabetic, suffering from or relating to diabetes
diagnōsis, is f - diagnosis, medical denotion of the disease from which
a person suffers
febris, is $f$ - fever
foetor, orris m - fetor, a foul odour or stench
gravida, ae $f$ - gravida, a woman who is pregnant
halitōsis, is f - halitosis, fetid or offensive breath
herpes, ētis $m$ - herpes, inflammation of the skin or mucous membrane, with clusters of deep-seated vesicles
indigestio, ōnis f - indigestion, any disturbance of the normal process of digestion
infarctus, us $m$ - infarct (infarction), a wedge-shaped area of dead tissue, with or without haemorrhage, produced by the obstruction of an end artery
insufficientia, ae f - insufficiency, the state of being inadequate to perform normal function
mellītus, a, um (diabētes) - mellitus (diabetes), characterized by a high fasting blood sugar
maculōsus, a, um - a maculate, marked by maculae
morbus, i m-a disease
neonātus, a, um - a newly born child
palpatio, ōnis f - palpation, the method of physical examination in which the hands are applied to the surface of the body, so that by sense of touch information is obtained about the condition of inner organs
percussio, ōnis f - percussion, the art of striking the thoracic or abdominal wall in order to produce sound vibration from which the nature of the underlying structures can be assessed
polyuria, ae f - polyuria, increase in the amount of the urine exerted
prophylaxis, is $f$ - prophylaxis, the art of preventing disease
sive - or
syndrŏmum, i n - a syndrome, a distinct group of signs which form a characteristic clinical picture of the disease
thrombotĭcus, a, um - thrombotic, characterized or caused by thrombosis
toxicōsis, is f - toxicosis, the pathological condition caused by the adsorption of poison
vitium, in - a defect or a vice, vitium

## English-Latin vocabulary

acute - acūtus, a, um
alimentary - alimentarius, a, um
a symptom, the consciousness of a disturbance in a bodily function symptōma, ătis n
a syndrome, a distinct group of signs which form a characteristic clinical picture of the disease - syndrömum, in
a tissue - textus, us $m$
a transfusion, the introduction into the blood vessels of the circulatory system of sterile fluids such as blood, plasma, serum and other solutions - transfusio, ōnis f
cardinal - cardinālis, e
chronic - chronǐcus, a, um
collapse, a state of extreme weakness with physical and mental depression collapsus, us m
coma, the state of complete loss of consciousness from which the patient cannot be roused by any ordinary external stimulus - coma, ătis $n$
eczema, a non-contagious inflammatory disease of the skin with much itching and burning - eczěma, ătis n
emphysema, a condition in which the alveoli of he lungs are dilated emphysēma, ătis n
endogenous, having origin within the organism - endogěnus, a, um
exogenous, belonging to aetiological factors outside the organism - exogĕnus, a, um
fever - febris, is f
hereditary - hereditarius, a, um
hypoglycaemic, relating or belonding to, or bringing about hypoglycaemia, a low blood sugar concentration - hypoglycaemĭcus, a, um
intermittent, coming and going at intervals - intermittens, ntis
paralysis, loss of motor power due to a functional or organic disorder of neural or neuromuscular mechanismus - paraly̆sis, is $f$
plasma, the fluid portion of the blood in which the blood corpuscles are suspended - plasma, ătis n
pneumonia, an inflammation of the spongy tissue of the lung - pneumonia, ae $f$
peduncle - peduncŭlus, i m
primary - primarius, a, um
spongiform, having resemblance to a sponge - spongiformis, e
subacute, (disease) running a moderately rapid and severe course for which the word acute would not be appropriate - subacūtus, a, um
suppurative, pus-forming - suppuratīvus, a, um
tomography, body-section radiography - tomographia, ae f
ultrasonic, ultrasound - ultrasonarius, a, um

## Lesson 26 <br> MULTIWORD CLINICAL TERMS. PART № 2

## § 162. EXERCISES

1. Give the dictionary form of every word and the full definition of the italicized words; translate the multiword terms into English:
alopecia occipitālis neonatōrum; gastrorrhoea continua chronica; granulöma benignum glandŭlae thyroideae; infectio latens; infammatio bacteriālis; insufficientia arteriārum mesentericārum; lymphangiōma simplex; melanōsis irĭdis; myasthenia laryngis; myelītis traumatĭca; neuralgia faciālis vera; neurit̄̄s puerperālis; osteītis deformans; osteōma spongiōsum; prolapsus recti; psychōsis senīlis; situs viscěrum inversus; spasmus intestinōrum
2. Give the dictionary form of every word and the full definition of the italicized words; translate the multiword terms into Latin:
acquired immune deficiency syndrome (AIDS); benign lymphocytic meningitis; cerebral oedema; chronic glossitis with anaemia; diffuse goitre; direct metastasis; dropsy of the gall bladder; fetal gigantism; geminated composite odontome; intravenous narcosis; infective hepatitis; monostotic fibrous dysplasia; odontogenic fibroma; pelvic haematoma; postoperative thrombosis; psychogenic headache; secondary glaucoma; senile osteoporosis; viral enteritis

## § 163. VOCABULARY TO LESSON 26

## Latin-English vocabulary

alopecia, ae f - alopecia, loss of hair
bacteriālis, e - bacterial, belonging to or consisting of bacteria
benignus, a, um - benign
continuus, a, um - continued
deformans, ntis - deforming
gastrorrhoea, ae f - gastrorrhoea, the secretion by the stomach of an abnormally large quantity of gastric juice or of mucus
granulōma, ătis n - a granuloma, a tumour composed of granulation tissue
infectio, ōnis f - an infection, the invasion of a pathogenic organism into the body and its subsequent multiplication
inflammatio, ōnis f - an inflammation
insufficientia, ae f - insufficiency
inversus, a, um - inverse
latens, ntis - hidden
lymphangiōma, ătis $n$ - lymphangioma, a tumor formed of lymphatic tissue mesenterĭcus, a, um - mesenteric
melanōsis, is f - melanosis, an abnormal deposition of the black pigment (melanin) in the skin or other tissues
myasthenia, ae f - myasthenia, weakness of muscles from whatever cause
myelītis, itĭdis f - myelitis, an inflammation of the bone marrow
neuralgia, ae f - neuralgia, a painful affection of the nerves due to functional disturbances or to neuritis
neurītis, itĭdis $f$ - neuritis, an inflammation of a nerve
osteītis, itĭdis f - osteitis, an inflammation of a bone due to infection or injury
osteōma, ătis $n$ - osteoma, an innocent tumor of a bone
prolapsus, us $m$ - prolapse, the sinking down or protrusion of a part or viscus
psychōsis, is $f$ - psychosis, any kind of mental disorder
puerperālis, e - puerperal
senīlis, e - senile
situs, us $m$ - a position, a site
spasmus, i m - a spasm, a sudden, powerful, involuntary contraction of a muscle
spongiōsus, a, um - spongy, (spongious), full of small holes, like a sponge
traumatǐcus, a, um - traumatic
verus, a, um - true
viscus, ěris $n$ - a viscus or viscera, the internal organs of the body which are closely related to the great serous cavities - pleural, pericardial or peritoneal

## English-Latin vocabulary

acquired - acquisītus, a, um
benign - benignus, a, um
composite - compositus, a, um
deficiency - deficientia, ae f
diffuse - diffūsus, a, um
direct - directus, a, um
dropsy - hydrops, ōpis m
dysplasia, abnormal development of tissue - dysplasia, ae f
enteritis, inflammation of the mucous membrane of the intestines - enterītis, itǐdis $f$
fetal - fetalis, e
fibroma, an innocent tumor composed chiefly of connective tissue - fibrōma, ătis n
fibrous - fibrōsus, a, um
geminated - geminātus, a, um
gigantism, a condition of excessive tallness - gigantismus, im
glaucoma, a condition of increased intraocular pressure and its consequences glaucōma, ătis n
glossitis, an inflammation of the tongue - glossitis, itídis $f$
goitre, an enlargement of the thyroid gland - struma, ae $f$
headache - dolor (öris m) capitis
haematoma, a tumor or swelling composed of blood - haematōma, ătis n
immune - immūnus, a, um
immunodeficiency - immunodeficientia, ae f
infective - infectīvus, a, um
intravenous - intravenōsus, a, um
lymphocytic - lymphocytĩcus, a, um
metastasis, the transfer of disease from its primary site to distant parts of the body by blood vessels, lymphatics or direct contiguity - metastăsis, is f
monostotic, pertaining to a single bone - monostotĭcus, a, um
narcosis, stupor produced by drugs and tending to insensibility and paralysis narcōsis, is $f$
odontome, a solid or cystic tumour occurring in the jaws which is derived from cells concerned in tooth development - odontōma, ătis n
odontogenic, relating to the development of the teeth - odontogěnus, a, um
oedema, the presense of excessive amounts of fluid in the intercellular tissue spaces of the body - oedēma, ătis n
osteoporosis, a rarefaction of bone - osteoporōsis, is $f$
postoperative - postoperatīvus, a, um
psychogenic, developing or originating because of mental causes psychogěnus, a, um
secondary - secundarius, a, um
senile - senīlis, e
thrombosis, intravascular coagulation during life, producing a thrombus thrombōsis, is $f$
viral - virālis, e
Lesson 27
MULTIWORD CLINICAL TERMS. PART № 3

## § 164. ExERCISES

1. Give the dictionary form of every word and the full definition of the italicized words; translate the multiword terms into English:
abscessus gingivālis; avulsio nervi phrenǐci; calcŭlus venōsus; carcinōma in situ; combustio thermālis faciēi; commotio cerěbri; congelatio digitōrum pedis dextri; ectopia ocŭli; erosio cervīcis utěri; extractio corpŏris aliēni; poly̆pi laryngis; punctio lumbālis; ruptūra ligamentōrum hepătis; sectio cadavěris; transplantātum corneae; ulcus perfŏrans duodēni; verrūcae planae
2. Give the dictionary form of every word and the full definition of the italicized words; translate the multiword terms into Latin:
breast amputation; chemical burn of the oesophagus; closed fracture of the right femur; concussion of the retina; evisceration of the eye; functional aortic stenosis; internal injury; lung calculi; open operation; partial ophthalmoplegy; resection of a joint and a rib; splenic puncture; subcunaneous wound; replantation of the left hand; tendon transplantation; traumatic erythema; ulceration of the stomach

## § 165. Vocabulary to lesson 27

## Latin-English vocabulary

abscessus, us $m$ - abscess, an accumulation of pus circumscribed in a cavity produced by tissue disintegration
aliēnus, a, um - foreign
avulsio, $\overline{\text { onis }} \mathrm{f}$ - avulsion, the forcible removing a portion from a follow structure
combustio, ōnis f - burn, an injury caused by heat or by chemical or physical agents having an effect similar to heat
commotio, ŏnis $f$ - a concussion or a violent shaking of a structure
congelatio, ōnis f - congelation, frostbite, a local morbid condition caused by freezing
ectopia, ae f - ectopia, a morbid congenital malposition or traumatic displacement of an organ or part
erosio, ōnis f - erosion, any superficial destructive process
extractio, ōnis $f$ - extraction, the act or process of drawing out a part of body or foreign body
gingivālis, e - gingival
partialis, e - partial
planus, a, um - plane
phrenǐcus, a, um - phrenic
perforrans, ntis - perforating
poly̆pus, i m - a polyp, a tumor with a stalk arising from mucous membranes or the body surface
punctio, ōnis f - a puncture, the operation of piercing a viscus or a swelling either to establish the nature of its content or to empty it
ruptūra, ae f - rupture, the breaking or forcible disruption of continuity of a bone or another structure
sectio, ōnis f - a section, the act of cutting
sectio cadavěris - a post-mortem examination of dead body
thermalis, e - thermal
transplantātum, in - a transplant, a piece of tissue to transfer from one site to another
verrūca, ae f - a wart

## English-Latin vocabulary

amputation, the surgical removal of a limb or a portion of a limb or of any other appendage - amputatio, ōnis f
aortic - aortĭcus, a, um
breast - mamma, ae f
burn - combustio, ōnis f
calculus (plur. calculi), a solid pathological concretion - calcŭlus, i m
chemical - chemĭcus, a, um
closed - clausus, a, um
concussion, a violent shaking of a structure - commotio, ōnis $f$
erythema, redness of the skin due to hyperaemia - erythēma, ătis n
fracture, a break in the continuity of a bone - fractūra, ae f
functional - functionālis, e
ingury - laesio, ōnis f
open - apertus, a, um
operation - operatio, ōnis $f$
ophthalmoplegia, palsy (paralysis) of the ocular muscles - ophthalmoplegia, ae f
partial - partiālis, e
puncture, the operation of piercing a viscus or a swelling either to establish the nature of its content or to empty it - punctio, ōnis $f$
resection, surgical removal of a part, usually of some magnitude, e. g. jaw, stomach, colon etc. - resectio, ōnis f
splenic - splenǐcus, a, um

## § 166 Model (Sample) of the final test IN CLINICAL TERMINOLOGY

1. Give Greek initial roots and Latin equivalents (in the dictionary form) with the following meaning:
1) ear; 2) child; 3) head; 4) voice; 5) quick; 6) short; 7) many; 8) lacrimal sac
2. Compose one-word terms with the dictionary form with the following meaning:
1) specialist studying the man in the process of his evolution; 2) results of quantitative and qualitative examination of blood; 3 ) any kind of pain affecting a joint; 4) any morbid condition or abnormal growth of the hair; 5) the origin and development of bone marrow; 6) a person with an unusually small size of head; 7) acute inflammation of the gray mater of the brain; 8) calculus on the teeth
3. Write down the Latin dictionary form and give the full definition of the following terms in English:
1) iatrogenic; 2) psychiatrist; 3) apnea; 4) phlebography; 5) erythema; 6) megaduodenum; 7) galactostasis; 8) typhlocele
4. Give the dictionary form of each word and the full definition of italicized words; translate into Latin the multiword terms:
1) acquired immune deficiency syndrome; 2) secondary glaucoma; 3) replantation of the left hand; 4) partial ophthalmoplegy; 5) chemical burn of the oesophagus; 6) dropsy of the gall bladder; 7) monostotic fibrous dysplasia; 8) benign lymphocytic meningitis

## LATIN-ENGLISH VOCABULARY

## A

abdōmen, innis $\mathbf{n}$ abdomen
abscessus, us $\mathbf{m}$ an accumulation of pus circumscribed in a cavity produced by tissue disintegration, abscess
achlorhydria, ae f complete lack of free hydrochloric acid in the gastric juice, achlorhydria
acūtus, a, um acute
adenalgia, ae $f$ a painful condition of a gland, adenalgia
adenasthenia, ae $\mathbf{f}$ functional deficiency in a gland, adenasthenia
adenocarcinōma, ătis n
a carcinomatous tumor of glandular epithelium and connective tissue, adenocarcinoma
aërobion, in a microorganism which utilizes and assimilates atmospheric oxygen during growth, aerobe, aerobion
aetiologicus, a, um aetiologic, based on the aetiology - the science of the investigation of the cause or origin
aliēnus, a, um foreign
allergicus, a, um allergic
alopecia, ae $\mathbf{f}$ loss of hair, alopecia
amenorrhoea, ae $\mathbf{f}$ the pathological absence or stoppage of the menstrual discharge from the uterus, amenorrhoea
amnesia, ae $\mathbf{f}$ loss of memory of varying degree, amnesia
anaërobion, in a microorganism which is able to exist and multiply beeng deprived of either free oxygen or air, anaerobe
anaesthesiolŏgus, $\mathbf{i} \mathbf{m}$ a specialist in the administration of anaesthetics, anaesthesiologist
angiopathia, ae $f$ any disease of blood vessels, angiopathy
anthropogěnus, a, um caused by human activities
anthropologia, ae $f$ anthropology, science studying the man in the process of his evolution
anthropolŏgus, i m anthropologist, specialist studying the man in the process of his evolution
apodia, ae $\mathbf{f}$ congenital absence of feet, apodia
arteria, ae $f$ artery
arthromalacia, ae $\mathbf{f}$ softening of the joints, arthromalacia
asthenia, ae floss of vital forces, asthenia
autohaemotherapia, ae $f$ a method of treatment in which the patient's own blood is administered to him, autohaemotherapy
autopepsia, ae $\mathbf{f}$ the process of spontaneous disintegration of cells and tissues resulting from the action of intracellular enzymes, autopepsia
avulsio, $\overline{\text { onis }} \mathbf{f}$ the forcible removing a portion from a hollow structure, avulsion

## B

bacteriālis, e bacterial, originating or derived from, belonging to or consisting of bacteria
benignus, a, um benign
biologia, ae f biology, science studying forms of life and living organisms
blepharītis, itĭdis $\mathbf{f}$ inflammation of the eyelids, blepharitis
blepharoplastǐca, ae f a plastic operation to restore an eyelid
brachycephălus, i m an individual with disproportionately short head, brachycephalic
brachydactylia, ae $f$ a condition in which there are abnormally short fingers or toes, brachydactylia
bradyphagia, ae $f$ slowing of swallowing, bradyphagia
bradypnoë, ës fan abnormally slow rate of breathing, bradypnoea
broncholithiăsis, is $\mathbf{f}$ the condition in which calculi occur in the lumen of bronchial tubes, broncholithiasis

## C

cadāver, ěris $\mathbf{n}$ a corps; a lifeless human body
calcŭlus, i m a solid pathological concretion, usually of inorganic matter, formed in any part of the body, calculus
carcinōma, ătis $\mathbf{n}$ a malignant epithelial tumor, carcinoma
carcinomatōsis, is $\mathbf{f}$ the condition in which carcinoma is widely distributed throughout the body, carcinomatosis
cardiogĕnus, a, um cardiogenic, arising because of the heart
cardiolŏgus, i maspecialist treating
heart diseases, cardiologist
cerēbrum, i n cerebrum
cervix, īcis f cervix
cholecystītis, itĭdis $\mathbf{f}$ inflammation of the gallbladder, cholecystitis
chondropathia, ae $\mathbf{f}$ any disease affecting a cartilage, chondropathy
chronĭcus, a, um chronic, long continued
chylothōrax, $\overline{\text { ancis }} \mathbf{m}$ the condition in which there is an effusion of the lymph into the thoracic cavity, chylothorax
colpotomia, ae $\mathbf{f}$ any cutting operation on the vagina, colpotomy
combustio, ōnis f burn, an injury caused by heat or by chemical or physical agents having an effect similar to heat
commotio, ōnis facussion or a violent shaking of a structure
congelatio, $\bar{o} n i s ~ f$ congelation, frostbite, a local morbid condition caused by freezing
congenĭtus, a, um congenital
continuus, a, um continued
cor, cordis $\mathbf{n}$ heart
cornea, ae f cornea
corpus, ŏris n body
craniometria, ae f measurement of the skull, craniometry
cryochirurgia, ae f surgical procedures in which tissue is destroyed by freezing, cryosurgery
cryotherapia, ae $f$ the science of the use of cold as a therapeutic measure, cryotherapy
cryptophthalmia, ae f congenital adhesion of the eyelids so that the eyeballs can not be seen, cryptophthalmia
cystorrhagia, ae $\mathbf{f}$ haemorrhage from the urinary bladder, cystorrhagia
cystoschĭsis, is $\mathbf{f}$ a congenital fissure of urinary bladder, cystoschisis

## D

dacryostenōsis, is f narrowing or stricture of the duct of the lacrimal gland, dacryostenosis
dactylospasmus, ae $f$ spasmodic contraction of a finger or toe, dactylospasm
decapsulatio, ōnis $\mathbf{f}$ surgical removal of a capsule or sheath, decapsulation
deformans, ntis deforming
dermatomycōsis, is $\mathbf{f}$ a generic term
for all cutaneous infections due to fungi
dermatōsis, is $\mathbf{f}$ any disease of the skin, dermatosis
descensus, us $m$ the sinking down or protrusion of a viscus or its part, descent
desmorrhexis, is $\mathbf{f}$ rupture of a ligament, desmorrhexis
desmurgia, ae $\mathbf{f}$ the science of applying ligatures or bandages to a part, desmurgy
dexter, tra, trum right
diabētes, ae $\mathbf{m}$ anyone of a group of diseases in which there is polyuria and a disturbed metabolism, diabetes
diabetǐcus, a, um diabetic, suffering from or relating to diabetes
diagnōsis, is $\mathbf{f}$ medical denotion of the disease from which a person suffers, diagnosis
digĭtus, i m finger, toe
disarticulatio, $\overline{\text { onis }} \mathbf{f}$ separation or amputation in a joint, without cutting through bone, disarticulation
dolichocephalia, ae $f$ the state of having a relatively long skull, dolichocephalia
duodēnum, i n duodenum
dysgeusia, ae $f$ impairment or perversion of the sense of taste, dysgeusia
dysthyreōsis, is $\mathbf{f}$ imperfect functioning of the thyroid gland, dysthyreosis

## E

ectopia, ae $\mathbf{f}$ a morbid congenital malposition or traumatic displacement of an organ or part, ectopia
embryologia, ae $f$ the branch of biological science which is concerned with the origin and development of the embryo from the ovum to the stage of extrauterine life, embryology
embryotomia, ae $\mathbf{f}$ dissection of an embryo or fetus, embryotomy
empyēma, ătis $\mathbf{n}$ a collection of pus in a cavity, empyema
encephalogramma, ătis $n$ any X-ray film obtained in the radiological examination of the ventricles and subarachnoid space of the brain, encephalogram
enterocolītis, itǐdis $f$ an inflammed condition of the small intestine and the colon, enterocolitis
erosio, $\overline{\mathbf{o}}$ nis $\mathbf{f}$ any superficial destructive process, erosion
erythropenia, ae fas state in which there are too few erythrocytes, erythropenia
evisceratio, $\overline{\text { onnis }} \mathbf{f}$ removal of the contents of an organ or part, evisceration
extractio, $\overline{\mathbf{o}}$ nis $\mathbf{f}$ the act or process of drawing out a part of body or foreign body, extraction

## F

faciālis, e facial
facies, eil f face
febris, is $\mathbf{f}$ fever
fetor, $\overline{\text { oris }} \mathbf{m}$ a foul odour or stench, fetor

## G

galactorrhoea, ae $\mathbf{f}$ an excessive flow of milk, galactorrhoea
gaster, tris $\mathbf{f}$ stomach
gastrocēle, es $\mathbf{f}$ hernia of the stomach or of a portion which has become pouched, gastrocele
gastrorrhoea, ae $\mathbf{f}$ the secretion by the stomach of an abnormally large quantity of gastric juice or of mucus, gastrorrhoea
gastrospasmus, i m an involuntary contraction of the stomach muscle, gastrospasm
gastrostŏma, ătis n natural or artificial gastric fistula, gastrostoma
geriāter, tri m a specialist treating diseases of the aged, geriatrician
glandŭla, ae f gland
gingivālis, e gingival
glossoplegia, ae f paralysis of the tongue, glossoplegia
glycaemia, ae $f$ a condition in which
the circulating blood contains a quantity of sugar above normal amounts, glycaemia
granulōma, ătis $\mathbf{n}$ a tumour composed of granulation tissue, granuloma
gravida, ae $f$ a woman who is pregnant, gravida
gynaecolŏgus, i ma specialist for treatment genital diseases in women, gynecologist

## H

haemarthrōsis, sis $\mathbf{f}$ extravasation of blood into a joint, haemarthrosis
haematologia, ae f branch of medicine studying blood and its diseases, hematology
halitōsis, is $\mathbf{f}$ fetid or offensive breath, halitosis
hemianopsia, ae f(=hemianopia, ae f) loss of half the vision in each eye, hemianopsia (hemianopia)
hemicrania, ae $f$ a periodic morbid condition with localized headaches, hemicrania
hemiplegia, ae f paralysis of one half of the body, hemiplegia
hepar, ătis $n$ liver
herpes, ētis $\mathbf{m}$ inflammation of the skin or mucous membrane, with clusters of deep-seated vesicles, herpes
hidradenītis, itǐdis $\mathbf{f}$ inflammation of the sweat glands, hidradenitis
histoly̆sis, is $\mathbf{f}$ spontaneous dissolution of living organic tissue, histolysis
hydromētra, ae $\mathbf{f}$ an accumulation of watery fluid in the cavity of the uterus, hydrometra
hyperaemia, ae $\mathbf{f}$ an excess of blood in any part of the body, hyperaemia
hyperkeratōsis, is $\mathbf{f}$ hypertrophy of the stratum corneum of the skin, hyperkeratosis
hyperthermia, ae $\mathbf{f}$ very high body temperature, hyperthermia
hypochylia, ae $f$ a condition in which the amount of gastric juice is lessened, hypochylia
hyposalivatio, ōnis facondition in which there is abnormal decrease
in the secretion of saliva, hyposalivation
hypotonia, ae $\mathbf{f}$ lessened tension in any body structure, hypotonia

## I

iatrogĕnus, a, um happening because of the physician's manner or injudicious remarks, iatrogenic implantatio, ōnis f the introduction of one tissue or structure into another with the aim of improving the function of any part of the body, implantation
implantātum, i n implant, any piece of tissue for use as a graft
indigestio, $\overline{\text { onis }} \mathbf{f}$ any disturbance of the normal process of digestion, indigestion
infarctus, us $\mathbf{m}$ a wedge-shaped area of dead tissue, with or without haemorrhage, produced by the obstruction of an end artery, infarct, infarction
infectio, $\overline{\boldsymbol{o}}$ nis $\mathbf{f}$ the invasion of a pathogenic organism into the body and its subsequent multiplication, infection
inflammatio, ōnis $\mathbf{f}$ inflammation
insufficientia, ae $\mathbf{f}$ the state of being inadequate to perform normal function, insufficiency
intestīnum, in intestine
inversus, a, um inverse
iris, ĭdis f iris

## K

keratotomia, ae $\mathbf{f}$ making an incision into the cornea, keratotomy

## L <br> labiālis, e labial

laparogastrostomia, ae f
the operation to create an artificial opening in the stomach, laparogastrostomy
laparoscopia, ae $\mathbf{f}$ the act or process of examining the peritoneal cavity and its contents by means of a laparoscope, laparoscope
larynx, yngis m larynx
latens, ntis hidden
leucocytōsis, is $\mathbf{f}$ an increase in the total number of leucocytes in the blood, leucocytōsis
ligamentum, in ligament
lipuria, ae $\mathbf{f}$ the presence of an oily emulsion or fat in the urine, lipuria
lumbālis, e lumbal
lymphangiōma, ătis $\mathbf{n}$ a tumor formed of lymphatic tissue, lymphangioma
lymphostăsis, is $\mathbf{f}$ cessation of the flow of lymph, lymphostasis

## M

maculōsus, a, um maculate, marked by maculae
mastogramma, ătis $\mathbf{n}$ result of breast X-ray examination, mastogram
megacōlon, $\mathbf{i} \mathbf{n}$ a condition in which there is great dilatation of the large intestine, megacolon
melanoderma, ătis $\mathbf{n}$ a condition in which there is an unusually large accumulation of melanin in the skin, melanoderma
melanōsis, is $\mathbf{f}$ an abnormal deposition of the black pigment (melanin) in the skin or other tissues, melanosis
mellītus, a, um (diabētes) mellitus (diabetes) characterized by a highfasting blood sugar
menalgia, ae f painful menstruation, menalgia
meningiōma, ătis $\mathbf{n}$ a meningeal tumor, thought to arise from the arachnoidal villi, meningioma
mesenterǐcus, a, um mesenteric
metamorphōsis, is $\mathbf{f}$ change of form or structure, metamorphosis
microgenia, ae facondition in which the chin is of unusually small size, microgenia
micromyelia, ae f general reduction in size of the spinal cord, micromyelia
micronychia, ae $\mathbf{f}$ small nail or nails, micronychia
monodactylismus, i ma congenital condition in which one finger or toe only is present on the hand or the foot, monodactylism
morbus, $\mathbf{i} \mathbf{m}$ disease
myasthenia, ae $\mathbf{f}$ weakness of muscles from whatever cause, myasthenia
myelītis, itǐdis $\mathbf{f}$ inflammation of bone marrow, myelitis
myocēle, es $\mathbf{f}$ hernia of a muscle, myocele
myoplegia, ae f paralysis of muscle or a condition in which is decreased muscular force, myoplegia

## N

necropneumonia, ae f gangrene of the lung, necropneumonia
neonātus, a, um s newly born child
neoplasma, ătis $\mathbf{n}$ any new and morbid formation of tissue, neoplasm
nephrolithiăsis, is $\mathbf{f}$ a condition characterized by the presence of
gravel or of renal calculi, nephrolithiasis
nervus, im nerve
neuralgia, ae $f$ a painful affection of the nerves, due to functional disturbances or to neuritis, neuralgia
neurītis, itǐdis $\mathbf{f}$ inflammation of a nerve, neuritis
neuropatholŏgus, i m a specialist treating diseases of nervous system, neuropathologist

## 0

occipitālis, e occipital
ocǔlus, i m eye
odontolithus, i m calculus on
the teeth, odontolith
odontogeněsis, is $\mathbf{f}$ the origin and formative development of teeth, odontogenesis
oligocytaemia, ae $f$ a condition in the blood in which there is cell deficiency, oligocytaemia
oligophrenia, ae $f$ congenital lack of the mentality, oligophrenia
oncolŏgus, i m a specialist treating tumors, oncologist
onychomycōsis, is $\mathbf{f}$ infection of nails caused by a fungus, onychomycosis
ophthalmoscopia, ae f instrumentalvisual examination of the eye, ophthalmoscopy
os, oris n mouth
osteītis, itídis $\mathbf{f}$ inflammation of bone due to infection or injury, osteitis
osteōma, ătis $\mathbf{n}$ an innocent tumor of bone, osteoma
osteomalacia, ae $\mathbf{f}$ softening of the bones, osteomalacia
osteonecrōsis, is $\mathbf{f}$ death of bony tissue, osteonecrosis
osteopathia, ae fisease of bones, osteopathia
osteoporōsis, is $\mathbf{f}$ rarefaction of bone, osteoporosis
otorhinolaryngologia, ae f branch of medicine for treating diseases of ear, nose and larynx, otorhinolaryngology

## P

pachydactylia, ae fabnormal thickening of a finger or toe, pachydactyly
palatoplegia, ae f paralysis affecting the soft palate, palatoplegia
palpatio, $\overline{\mathbf{o}}$ nis $\mathbf{f}$ the method of physical examination in which the hands are applied to the surface of the body, so that by sense of touch information is obtained about the condition of inner organs, palpation
pantalgia, ae $\mathbf{f}$ pain affecting all parts of the body, pantalgia
partialis, e partiāl
percussio, $\overline{\text { onnis }} \mathrm{f}$ the art of striking the thoracic or abdominal wall in order to produce sound vibration from which the nature of the underlying structures can be assessed, percussion
perfŏrans, ntis perforating
pes, pedis $\mathbf{m}$ leg
phlebocarcinōma, ătis n a malignant epithelial tumour affecting a vein, phlebocarcinōma
photophobia, ae $\mathbf{f}$ abnormal intolerance to light, photophobia
phrenǐcus, a, um phrenic
phthisiāter, tri m a specialist
treating tuberculosis, phthisiotherapist
physiologia, ae f science studying normal vital processes in human body, physiology
phytotherapia, ae f method of treatment by means of medical plants, phytotherapy
planus, a, um plane
pneumocentēsis, is $\mathbf{f}$ lung puncture in order to aspirate the contents of a cavity, pneumocentesis
pneumoëmpyēma, ătis n the presence of pus and gas within the pleural space, pneumoempyema
poliomyelītis, itĭdis $f$ an acute inflammation of anterior horn cells of the spinal cord due to polioviruses, poliomyelitis
polymastia, ae $f$ the state in which in human beings there are more than two distinct mammary glands, polymastia
poly̆pus, i m a tumor with a stalk arising from mucous membranes or the body surface, polyp
polyuria, ae $f$ increase in the amount of the excreted urine, polyuria
proctolŏgus, i m a specialist treating diseases of rectum, proctologist
prognathia, ae $f$ a condition in which there is abnormal projection of one or both jaws, prognatism
prolapsus, us $\mathbf{m}$ the sinking down or protrusion of a viscus or its part, prolapse
prophylaxis, is $\mathbf{f}$ the art of preventing disease, prophylaxis
pseudoarthrōsis, is $\mathbf{f}$ a false joint formed between the fragments of
a fractured bone which have failed to unite, pseudarthrosis
psychiatria, ae $\mathbf{f}$ branch of medicine treating mental diseases, psychiatry
psychōsis, is $\mathbf{f}$ any kind of mental disorder, psychosis
puerperalis, e puerperal
punctio, $\overline{\text { onn }} \mathbf{f}$ the operation of piercing a viscus or a swelling either to establish the nature of its content or to empty it, puncture
pyelītis, itĭdis $\mathbf{f}$ inflammation of the pelvis of the kidney, pyelitis
pyogĕnus, $a$, um forming or producing pus, pyogenic
pyopneumothōrax, ācis m an inflammatory condition characterized by the presence of purulent fluid and gas in a pleural cavity, pyopneumothorax
pyosalpinx, ngis $\mathbf{f}$ inflammation of the uterine tube which has progressed to pus formation, pyosalpinx

## R

rectum, in rectum
renālis, e renal
replantatio, ōnis $\mathbf{f}$ the plantation of a removed part of the whole again, replantation
resectio, ōnis f surgical removal of a part, usually of some magnitude, e. g. jaw, stomach, colon etc., resection
rhinogramma, ătis $\mathbf{n}$ X-ray film of the nose, rhinogram
ruptūra, ae $\mathbf{f}$ the breaking or forcible disruption of continuity of the bone or an other structure, rupture

## S

salpingectomia, ae $\mathbf{f}$ excision of a uterine tube, salpingectomy
salpingoly̆sis, is $\mathbf{f}$ breaking-down of adhesions in a uterine tube, salpingolysis
sarcōma, ătis $\mathbf{n}$ a malignant tumor of connective tissue or its derivatives, sarcoma
sclerōma, ătis $\mathbf{n}$ an area of indurated tissue, particularly in the mucous membrane of the nose or larynx, scleroma
sectio, önis $\mathbf{f}$ the act of cutting, section
sectio cadavěris a post-mortem examination of dead body
senīlis, e senile
simplex, ĭcis simple
situs, us $\mathbf{m}$ position, site
sive or
somatologia, ae $\mathbf{f}$ branch of anthropology, studying structure of human body, somatology
spasmophilia, ae $\mathbf{f}$ a morbid state in which there is a tendency to convulsions and spasm, spasmophilia
spasmus, i m a sudden, powerful, involuntary contraction of muscle, spasm
sphygmogramma, ătis $\mathbf{n}$ a record of the arterial pulse waves, sphygmogram
splanchnosclerōsis, is $\mathbf{f}$ hardening of any viscus, splanchnosclerosis
splenomegalia, ae fenlargement of the spleen, splenomegalia
spondylītis, itǐdis $\mathbf{f}$ inflammation of the spine, spondilitis
spondylodĕsis, is $\mathbf{f}$ the operation of fusion of the spine, usually by a bone graft, spondylodesis
spongiōsus, a, um spongy (spongious), full of small holes, like a sponge
stenothōrax, ācis $\mathbf{m}$ a short, narrow thorax or chest, stenothorax
stomatomycōsis, is $\mathbf{f}$ any morbid condition of the oral cavity caused by a microscopial fungus, stomatomycosis
stomatoscopia, ae $\mathbf{f}$ visualinstrumental examination of the oral cavity, stomatoscopy
syndrŏmum, in a distinct group of signs which form a characteristic clinical picture of the disease, syndrome

## T

tachycardia, ae frapid action of the heart, tachycardia
tenorrhaphia, ae $\mathbf{f}$ an operation for the suturing of the divided ends of a tendon, tenorrhaphy
tenotomia, ae $\mathbf{f}$ the cutting of a tendon, tenotomy
thermālis, e thermal
thermotherapia, ae $f$ the use of heat in the treatment of disease, thermotherapia
thoracocentēsis, is $\mathbf{f}$ a puncture of the wall of the thorax with the aim of any diagnostic, thoracocenthesis
thrombocytopoësis, is $f$ the formation of blood platelets, thrombocytopoiesis
thrombotĭcus, a, um characterized or caused by thrombosis, thrombotic
thyroideus, a, um thyroid
thyr(e)otoxicōsis, is $\mathbf{f}$ any toxic condition attributable to hyperactivity of the thyroid gland, thyrotoxicosis
toponeurōsis, is flocalized neurosis, a functional derangement in any part of the body, toponeurosis
toxicomania, ae $\mathbf{f}$ an insane desire for poison, toxicomania
toxicōsis, is $\mathbf{f}$ the pathological condition caused by the adsorption of poison, toxicosis
transplantātum, in a piece of tissue to transfer from one site to another, transplant
traumatǐcus, a, um traumatic
typhlectasia, ae $\mathbf{f}$ dilatation of the caecum, typhlectasia

## U

ulcus, ĕris n ulcer
unguis, is $\mathbf{m}$ nail
uraemia, ae $\mathbf{f}$ the condition which is associated with the retention of metabolic products in the blood and disturbance of acid-base ratio of the latter, uraemia
uranoschĭsis, is $\mathbf{f}$ cleft palate, a congenital fissure in the midline of the hard palate, uranoschisis
utěrus, i m uterus

## V

venōsus, a, um venous
verrūca, ae $f$ wart
verus, a, um true
viscus, ěris $\mathbf{n}$ the internal organs of the body which are closely related to the great serous cavities: pleural, pericardial or peritoneal
vitium, $\mathbf{i}$ n a defect or a vice, vitium

## X

xanthopsia, ae $\mathbf{f}$ a disturbance of color vision, when everything appears yellow, xanthopsia
xanthōsis, is $\mathbf{f}$ yellowish discolorration, especially of the skin, xanthosis
xerophthalmia, ae fa morbid
condition of eyes characterized by a shrunken appearance of the conjunctiva, xerophthalmia (=xeroma)

## ENGLISH-LATIN VOCABULARY

## A

an abnormally long colon of normal diameter, dolichocolon dolichocōlon, in
abnormally rapid breathing, tachypnoea tachypnoë, ës f
abnormal narrowing of the mouth, stenostomy stenostomia, ae f
abnormal narrowing of the internal diameter of a vessel, angiostenosis angiostenōsis, is f
abnormal quickness in eating, tachyphagia tachyphagia, ae f
abnormal slowness and weakness of the process of digestion, hypopepsia hypopepsia, ae f
abnormal sluggishness of physical movement, bradykinesis bradykinesia, ae f
abnormal thickening of a finger or toe, pachydactyly pachydactylia, ae $f$
an accumulation of pus in the pericardium, pyopericardium pyopericardium, in
achylia, absence of acid and pepsin
from the gastric juice achylia, ae f
acquired acquisītus, a, um
the act or process of drawing out a part of body or a foreign body, extraction extractio, ōnis $f$
acute acūtus, a, um
acute inflammation
of the gray matter of the brain, polioencephalitis polioencephalītis, itǐdis $f$
adenoma of the eyelid, blepharoadenoma
blepharoadenōma, ătis n
adiponecrosis, necrosis affecting the fatty tissue of the body adiponecrōsis, is $f$ aerobe, a microorganism which utilizes and assimilates atmospheric oxygen aërobion, in
aerobic, requiring gaseous oxygen in order to live aërobĭcus, a, um
aglossia, the congenital condition of being without a tongue aglossia, ae f
alimentary alimentarius, a, um
allergic allergicus, a, um
amputation, the surgical removal of a limb or a portion of a limb or of any other appendage amputatio, ōnis $f$
anaemia, changes in the red cells resulting in a reduction in the total amount of blood anaemia, ae f
anaerobe, a microorganism which is able to exist although deprived of free oxygen or air anaërobion, in
anaerobic, able to sustain life without free oxygen
anaërobǐcus, a, um
angiology, the science of the blood vessels angiologia, ae $f$
angioma, a tumor composed of blood vessels or of lymphatic vessels angiōma, ătis, n
anthropologist, a specialist studying the man in the process of his evolution anthropolŏgus, i m
aortic aortǐcus, a, um
apn(o)ea, the cessation in breathing apnoë, ës f
arthrocentesis, the surgical procedure of puncturing a joint arthrocentēsis, is $f$
arthralgia, any kind of pain affecting a joint arthralgia, ae $f$
atrichia, not having hair atrichia, ae f
atrophy, a condition of general malnutrition from whatever cause atrophia, ae $f$
atypical atypiccus, a, um
autolaryngoscopy, the examination of one's own larynx with a laryngoscope autolaryngoscopia, ae f
autoplasty, the repair of a diseased or injured tissue or organ by material taken from another part
of the body autoplastǐca, ae f
autopsy, post-mortem examination of a body in order to establish the cause of death autopsia, ae $f$

## B

benign benignus, a, um
biopharmaceutics, study of physical and chemical proprieties of medicinal substances
biopharmaceuticca, ae f
biopsy, examination for purposes of diagnosis of tissue cut from the living body biopsia, ae f
blepharotomy, incision of an eyelid
blepharotomia, ae f
brachyoesophagus, a congenitally short oesophagus brachyoesophăgus, i m
bradycardia, slowing of the heart rate bradycardia, ae $f$
branch of clinical medicine treating rectum diseases, proctology proctologia, ae f
branch of medicine treating diseases of children, paediatrics paediatria, ae $f$
breast mamma, ae f
bronchitis, an inflammated condition of the bronchi bronchîtis, ititdis $f$ burn combustio, ōnis $f$

## C

calculosis, the condition in which a number of calculi are present in any part of the body calculōsis, is $f$
calculus (plur. calculi), a solid pathological concretion calcŭlus, i m
calculus on the teeth, odontolith odontolithus, i m
cancerogenic (=carcinogenic), producing carcinoma cancerogěnus, a, um
carcinoma, a malignant epithelial tumor carcinōma, ătis n
a carcinoma the fragment of which contains cartilaginous elements, chondroma chondrōma, ătis n
a carcinomatous tumor of glandular epithelium and connective tissue, adenocarcinoma
adenocarcinōma, ătis n
cardinal cardinālis, e
cardiogram 1) result of X-ray examination of the heart;
2) graphical picture of heart work cardiogramma, ătis n
cardiography 1) X-ray examination of the heart; 2) graphical recording of heart activity cardiographia, ae f
causing the growth of tumors, oncogenous oncogĕnus, a, um
cephalalgia, pain in the head cephalalgia, ae f
cerebral cerebrälis, e
cerebrospinal cerebrospinālis, e
changes in the red cells resulting in a reduction in the total amount of blood anaemia, ae $f$
chemical chemĭcus, a, um
cholecystolithiasis, the condiition in which there are gallstones in the gall bladder or bile duct cholecystolithiăsis, is $f$
chondroporosis, a porous condition of cartilage shown in thinning of cartilage and formation of spaces and sinuses chondroporōsis, is $f$
chronic chronǐcus, a, um
a chronic disease of the skin, characterized by the appearance of laminated scales, psoriasis psoriăsis, is $f$
chyluria, the condition in which the urine contains lymph chyluria, ae f
closed clausus, a, um
collapse, a state of extreme weakness with physical and mental depression collapsus, us $m$
colonorrhagia, haemorrhage from the colon colonorrhagia, ae f
colpocystotomy, surgical incision into the urinary bladder through the wall of the vagina colpocystotomia, ae f
colpohysteropexy, the operative fixation of the uterus through the vagina colpohysteropexia, ae $f$
colpomyomectomy, removal of a myoma from the uterus by the vaginal route colpomyomectomia, ae f
coma, the state of complete loss of consciousness from which
the patient cannot be roused
by any ordinary external
stimulus coma, ătis n
composite compositus, a, um
a concussion or a violent
shaking of a soft structure
commotio, ōnis $f$
a condition characterized by the presence of gravel or of renal calculi, nephrolithiasis
nephrolithiăsis, is f
a condition in which the ability to swallow is lacking, aphagia aphagia
a condition in which the amount of gastric juice is lessened, hypochylia hypochylia, ae $f$
a condition in which there are abnormally short fingers or toes, brachydactylia
brachydactylia, ae f
a condition of enlargement of the liver, hepatomegalia hepatomegalia, ae f
congelation, frostbite, a local morbid condition caused by freezing congelatio, ōnis $f$ congenital cleft of a vertebral arch or several arches, spondyloschisis
spondyloschǐsis, is f
congenital fissure of the urinary bladder, cystoschisis cystoschǐsis, is f
cryosurgery, surgical procedures in which tissue is destroyed by freezing cryochirurgia, ae $f$
cryptolith, a calculus contained in a crypt cryptolithus, i m
cryptopsoriasis, hidden, latent psoriasis cryptopsoriăsis, is $f$
cystitis, inflammation of the urinary bladder cystītis, itĩdis $f$
cytology, the science of the form and functions of cells cytologia, ae f

## D

dacryorrhoea, an excessive flow of tears dacryorrhoea, ae $f$
deficiency deficientia, ae f
dermatitis, inflammation of the skin dermatītis, itĩdis $f$
desmalgia, pain in a ligament desmalgia, ae $f$
desmotomy, incision of the ligament desmotomia, ae f
diagnosis via examination of iris, iridodiagnostics iridodiagnostǐca, ae $f$
didactylism, the congenital condition
of having only two fingers on
a hand or two toes on a foot
didactylismus, i m
diffuse diffusus, a, um
dilatation of the stomach, gastrectasia gastrectasia, ae $f$
direct directus, a, um
a discharge of pus, pyorrhoea
pyorrhoea, ae $f$
any disease affecting a joint, arthropathy arthropathia, ae f
any diseased condition of the viscera, splanchnopathy splanchnopathia, ae f
any disease of skin, dermatosis dermatosis, is $f$
a disturbance of color vision when everything appears yellow, xanthopsia xanthopsia, ae $f$
dislocation, abnormal displacement of one bone upon another in a joint dislocatio, ōnis f
dolichocolon, an abnormally long colon of normal diameter dolichocōlon, in
dropsy, the abnormal accumulation of fluid in tissue or cavity space hydrops, $\bar{o}$ pis $m$
dysmenorrhoea, pain occurring in the back and lower abdomen at or about the time of the menses dysmenorrhoea, ae f
dysplasia, abnormal development of tissue dysplasia, ae f
dystonia, a state of disordered
tonicity dystonia, ae f
dystrophy, a disorder of the structure and functions of an organ or tissue due to perverted nutrition dystrophia, ae $f$

## E

ectopia, a morbid congenital malposition or traumatic displacement of an organ or part ectopia, ae $f$
eczema, a non-contagious
inflammatory disease of the skin with much itching and burning eczěma, ātis n
embolaemia, a condition in which emboli are present in the blood embolaemia, ae f
embryectomy, the surgical removal of the embryo embryectomia, ae f
embryopathology, the branch of pathology concerned with defective or abnormal development of embryo embryopathologia, ae f
emphysema, a condition in which the alveoli of the lungs are dilated emphysēma, ătis n
encephalomalacia, softening of the brain encephalomalacia, ae f
encephalopathy, any morbid condition of the brain encephalopathia, ae f
endogenous, having origin within the organism endogěnus, $a$, um
endometritis, an inflammation of the inner mucous membrane of the uterus endometrītis, itĭdis $f$
enophthalmus, recession of the eyeball into the cavity of the orbit enophthalmus, i m
enteritis, inflammation of the mucous membrane of the intestine enterītis, itīdis $f$
enterogastritis, inflammation of the small intestine and the stomach enterogastrītis, itĭdis $f$
enterolithiasis, the formation of calculi or concretions in the intestine entherolithiăsis, is f
enteromegalia, an unusually large size of the intestine enteromegalia, ae f
the entrance and establishment of parasites into the body of a host, invasion invasio, ōnis $f$
erythema, redness of the skin due to hyperaemia erythēma, ătis $n$
evisceration, a removel of the contents of an organ or part evisceratio, ōnis f
an excessive flow of milk, galactorroea galactorroea, ae f
excessive sensitiveness of any organ or part of the body, hyperaesthesia hyperaesthesia, ae f
exogenous, belonging to aetiological factors outside the organism exogĕnus, $a$, um eye ocŭlus, i m

## F

fetal fetālis, e
femur femur, ŏris $n$
fever febris, is f
fibroma, an innocent tumor composed chiefly
of connective tissue fibrōma, ătis $n$
fibrous fibrōsus, a, um
any fluid that has passed through the membrane of the skin, transudate transsudātum, in
the formation of concretions, lithiasis lithiăsis, is f
fracture, a break in the continuity of a bone fractūra, ae f
functional functionālis, e

## G

galactostasis, arrest or stagnation in the secretion of milk galactostăsis, is $f$
gall bladder vesīca fellea (biliāris)
geminated geminātus, a, um
gerontology, science studying living processes in the aged gerontologia, ae $f$
gigantism, a condition of excessive tallness gigantismus, i m
glaucoma, a condition of increased intraocular pressure and its consequences glaucōma, ătis n
glossitis, inflammation of the tongue glossitis, itǐdis f
gnathalgia, pain in one or both jaws
gnathalgia, ae f
gnathoschisis, a congenital fissure in the maxilla gnathoschissis, is $f$
goitre, an enlargement of the thyroid gland struma, ae f

## H

haematology, branch of medicine studying blood and its diseases haematologia, ae f
haematoma, a tumor or swelling composed of blood haematōma, ătis n
haematomyelia, bleeding within the substance of the spinal cord haematomyelia, ae f
haematosalpinx, collection and retention of blood in a uterine tube haematosalpinx, ngis $f$
haemogram, results of quantitative and qualitative examination of blood haemogramma, ătis n
haemophilia, a severe hereditary bleeding disease affecting males
and transmitted by females haemophilia, ae f
hand manus, us $f$
hardening of bony spaces, osteosclerosis osteosclerōsis, is f
headache dolor (ōris $m$ ) capĭtis
hemiatrophy, atrophy only affecting one half of the body, or one half of an organ hemiatrophia, ae f
hepatic hepatĩcus, a, um
hepatitis, inflammation of the liver hepatītis, itĩdis $f$
hepatomegalia, a condition of enlargement of the liver hepatomegalia, ae f
hereditary hereditarius, a, um
herniation of the uterus, metrocele metrocēle, es f
hidrosis 1) the process of secreting sweat; 2) abnormally profuse sweating hidrōsis, is f
hydrarthrosis, a watery effusion into the cavity of a joint hydrarthrōsis, is f
hydrometra, an accumulation of watery fluid in the cavity of the uterus hydromētra, ae $f$
hyperaesthesia, excessive sensitiveness of any organ or part of the body hyperaesthesia, ae f
hyperglycaemia, an excessive amount of sugar in the blood hyperglycaemia, ae f
hypersalivation, excessive secretion of saliva hypersalivatio, ōnis $f$
hypertension, high arterial blood pressure hypertensio, ōnis f
hypogalactia, the secretion of too
small quantity of milk
hypogalactia, ae f
hypoglycaemic, relating or
belonging to, or bringing about
hypoglycaemia, a low blood sugar
concentration hypoglycaemǐcus, a, um
hypomnesia, a weak or defective state of the memory hypomnesia, ae $f$
hypophrenia, feebleness of mind hypophrenia, ae f
hypoplasia, underdevelopment of a tissue or part hypoplasia, ae $f$ hypothermia, deficiency of body heat hypothermia, ae f

## I

iatrogenic, happening because of the physician's manner or injudicious
remarks, iatrogěnus, $a$, um
immune immūnus, a, um
immunodeficiency immunodeficientia, ae $f$
impairment of the voice, dysphonia
dysphonia, ae f
implant, any piece of tissue used
as a graft implantātum, in
implantation, the introduction of one tissue or structure into another with the aim of improving the function of any part of the body implantatio, ōnis $f$
incision of the abdominal wall
and excision of the uterus,
laparohysteroectomy
laparohysteroectomia, ae f
an increase in the total number of leucocytes, leucocytosis
leucocytōsis, is $f$
infective infectīvus, a, um
inflammation inflammation, ōnis $f$
$\sim$ of the cornea, keratitis keratītis, itǐdis f
$\sim$ affecting the pelvis of the kidney and the urinary bladder, pyelocystitis pyelocystītis, itĩdis $f$
$\sim$ in the nail fold, panaris panaritium, in
$\sim$ of the abdominal muscles, laparomyositis laparomyosītis, itīdis $f$
$\sim$ of the inner mucous membrane of the uterus, endometritis endometrītis, itĩdis f
~ of the liver, hepatitis hepatītis, itĩdis f
$\sim$ of the membranes of the brain or spinal cord, meningitis meningitis, itĩdis $f$
injury laesio, ōnis f
intermittent, coming and going at intervals intermittens, ntis
internal internus, a, um
intravenous intravenōsus, a, um
iridodiagnostics, diagnosis via examination of iris
iridodiagnostǐca, ae f

## J

joint articulatio, ōnis f

## K

keratomycosis, disease of cornea caused by a fungus
keratomycōsis, is $f$
keratoplasty, plastic surgery of the cornea keratoplastica, ae f
any kind of pain affecting a
joint, arthralgia arthralgia, ae $f$

## L

left sinister, tra, trum
lung pulmo, ōnis m
lymphangiitis, inflammation of lymphatic vessels lymphangiītis, itīdis $f$
lymphocytic lymphocytǐcus, a, um
lymphocytosis, an increase in the number of lymphocytes lymphocytōsis, is f

## M

macrocyte, a red blood cell that is larger than normal macrocyytus, im
macronychia, excessive length or size
of the nails macronychia, ae $f$
mammogram (=mastogram) result of breast X-ray examination, mammogramma. ătis n
a malignant tumor of connective tissue or its derivatives, sarcoma sarcōma, ătis n
mastopathy, any diseased condition of the mammary gland mastopathia, ae f
measurement the size of pelvis in women, pelvimetry pelvimetria, ae $f$
a medical practitioner skilled in general surgery, who specializes in the operative treatment of diseases of the nervous system, neurosurgeon neurochirurgus, i m
megaloduodenum, duodenum of abnormally large size megaloduodēnum, in
megalomania, a mental condition in which a person has grandiose delusions about himself and his own intellect, power, importance and so on megalomania, ae $f$
melanocarcinoma, a darkly pigmented malignant epithelial tumor melanocarcinōma, ătis n
a meningeal tumor thought to arise from the arachnoidal villi, meningioma meningiōma, ătis n
menalgia, painful menstruation menalgia, ae f
meningitis, inflammation of the membranes of the brain or spinal cord meningîtis, itídis $f$
meningoencephalitis, an inflammatory condition of the brain and its meninges meningoencephalītis, itīdis $f$
metastasis, the transfer of disease from its primary site to distant parts of the body by blood vessels, lymphatics or direct contiguity metastăsis, is f
micromastia, abnormal smallness of the mammary glands micromastia, ae f
microsphygmy, diminished strength of pulse microsphygmia, ae f
monocytopoesis, the production of monocytes in the bone marrow monocytopoësis, is $f$
monopathophobia, fear of a particular disease monopathophobia, ae f
monostotic, pertaining to a single bone monostoticcus, a, um
any morbid condition affecting the lungs, pneumopathy pneumopathia, ae f
any morbid condition of the nose, rhinopathy rhinopathia, ae $f$
any morbid condition or abnormal growth of the hair, trichopathy trichopathia, ae f
myelocytaemia, the presence of myelocytes in the blood myelocytaemia, ae f
myopia, short sight myopia, ae f

## N

narcosis, stupor produced by drugs and tending to insensibility and paralysis narcōsis, is f
narrowing or stricture of the duct of the lacrimal gland, dacryostenosis dacryostenōsis, is $f$
necraemia, a condition in which the blood loses its vitality necraemia, ae $f$
neoarthrosis, an artificial joint implanted by the surgical operation neoarthrōsis, is $f$
a neoplasm originating in embryonic elements or blighted ovum, embryoneoplasm embryoneoplasma, ătis n
nephrogenic, produced by or originating in a kidney nephrogĕnus, a um
nephropathy, disease of the kidney nephropathia, ae f
neurogenic, happening because of the nervous system neurogĕnus, a, um

## 0

odontogenic, relating to the development of the teeth odontogĕnus, a, um
odontome, a solid or cystic tumour occurring in the jaws which is
derived from cells conserved in tooth development odontōma, ătis n
oedema, the presence of excessive amounts of fluid in the intercellular tissue spaces of the body oedēma, ătis n
oesophagostenosis, narrowing of the oesophagus oesophagostenōsis, is f
oesophagostoma, any opening into the oesophagus apart from the normal entrance and exit oesophagostǒma, ătis n
oesophagus oesophăgus, i m
oligodactylia, a congenital deficiency of fingers, or toes oligodactylia, ae f
oncologist, a specialist treating tumorous diseases oncolŏgus, i m
oncotherapy, the treatment of tumours oncotherapia, ae f
onychodystrophy, malformation of the nails due to impaired nutrition onychodystrophia, ae f
open apertus, a, um
operation operatio, ōnis f
the operation for the relief
of hernia and the resultant reduction of the latter, herniotomia herniotomia, ae f
the operation of removal of
the adenoid growth by excision, adenotomy adenotomia, ae f
the operation of transference
of a tissue of an organ from
one place to an other with
the aim of improving
or renewing a function,
transplantation transplantatio, ōnis f
ophthalmoplegy, palsy (paralysis) of the ocular muscles ophthalmoplegia, ae f
ophthalmorrhexis, rupture of the eyeball ophthalmorrhexis, is $f$
ophthalmoscopy, instrumental-visual examination of the eye ophthalmoscopia, ae f
the origin and development of bone marrow, myelogenesis myelogenĕsis, is f
the origin and development of morbid condition,
pathogenesis pathogeněsis, is $f$
the origin, formation and development of body tissue, histogenesis histogeněsis, is $f$
osteochondrosis, a degenerative change in bony and cartilage tissues osteochondrōsis, is f
osteodystrophy, a disorder of bone nutrition osteodystrophia, ae f
osteomalacia, softening of the bones osteomalacia, ae f
osteoporosis, rarefaction of bone osteoporōsis, is $f$
otogenic, happening because of the ear otogěnus, a, um
otolaryngologist, a specialist treating ear and larynx diseases otolaryngolŏgus, i m

## P

pachycheilia, abnormal thickness or swelling of the lips pachycheilia, ae f
panaris, inflammation in the nail fold panaritium, in
paralysis affecting the soft palate, palatoplegia palatoplegia, ae f
paralysis, loss of motor strength due to a functional or organic disorder of neural or neuromuscular mechanismus paraly̆sis, is $f$
paralysis of similar parts on both sides of the body, diplegia diplegia, ae f
paranephritis, an inflammatory condition involving the connective tissue adjacent to the kidney paranephrītis, itídis $f$
partial partiālis, e
a pathological condition in which one muscle, one group of muscle or one part of the body is only affected, monoplegia monoplegia, ae f
a pathological condition involving many joints, polyarthropathy polyarthropathia, ae $f$
pathological softening of cartilage, chondromalacia chondromalacia, ae f
pediatrician, a specialist treating children's diseases paediāter, tri m
peduncle peduncŭlus, i m
pelvic pelvícus, a, um
pericystitis, inflammation in which the structures around the urinary bladder are affected pericystītis, itǐdis $f$
a person with an unusually small size of head, microcephalus microcephălus, i m
pharmacophobia, morbid fear of taking drugs or medicines pharmacophobia, ae f
pharmacotherapia, science studying
drugs and their usage, pharmacotherapy pharmacotherapia, ae f
phlebography 1) radiographic visualization of veins;
2) the tracing of the venous pulse by means of a phlebograph phlebographia, ae f
phoniatrics (=phoniatry), the treatment of disorders of speech phoniatria, ae f
phonocardiogram, the record produced by an instrument for recording heart sounds phonocardiogramma, ătis n
photophobia, abnormal intolerance
to light photophobia, ae f
phthisiologist, a specialist treating tuberculosis phthisiāter, tri m
phytotherapy, method of treatment by means of medical herbs phytotherapia, ae f
plasma, the fluid portion of the blood in which the blood corpuscles are suspended plasma, ătis $n$
any plastic operation for repair or reconstruction of the urinary bladder, cystoplasty cystoplastǐca, ae f
any plastic surgical operation on the vagina, colpoplasty colpoplastǐca, ae f
pneumocentesis, lung puncture in order to aspirate the contents of the cavity pneumocentēsis, is $f$
pneumoempyema, the presence of pus and gas within the pleural space pneumoempyēma, ătis n
pneumohaemothorax, an accumulation of gas, air and
blood in the cavity of the thorax pneumohaemothōrax, ācis m
pneumonia, inflammation of the spongy tissue of the lung pneumonia, ae f
pneumorrhaphy, the operation of suturing a wound of the lung pneumorrhaphia, ae f
pneumotomy, the making of an incision into the lung pneumotomia, ae f
podagra, gout, a disease of the purine metabolism characterized by attacks of arthritis with an assotiated raised serum uric acid podăgra, ae f
podalgia, sensation of pain in the foot podalgia, ae $f$
polioencephalopathy, any pathological condition of the gray matter of the brain polioencephalopathia, ae $f$
polyavitaminosis, a morbid condition caused by deficiency of several vitamins polyavitaminōsis, is f
polyposis, a condition in which the colon is studded with polypi growing from the mucous membrane polypōsis, is f
polypus of the vagina, colpopolypus colpopoly̆pus, i m
postoperative postoperatīvus, a, um
primary primarius, a, um
proctodiagnostics, examination
of the functional state of
the rectum proctodiagnostǐca, ae f
proctoscopy, instrumental-visual examination of the rectum proctoscopia, ae f
proctospasm, spasmatic contraction of the rectum proctospasmus, i m
profuse discharge of mucous fluid from the nose, rhinorrhoea rhinorrhoea, ae f
prolapse, the sinking down or protrusion of a viscus or its part prolapsus, us m
psychiatrist, specialist treating mental diseases psychiāter, tri m
psychogenic, developing or originating of mental causes psychogěnus, a, um
psychologist, specialist studying mental activities of a human
personality psycholŏgus, i m
puncture of the cornea,
keratocentesis keratocentēsis, is f
puncture, the operation of piercing
a viscus or a swelling either to establish the nature of its content
or to empty it punctūra, ae f;
punctio, ōnis f
pyuria, a condition in which pus is
present in the urine pyuria, ae f

## R

a red blood cell that is larger than
normal, macrocyte macrocy̆tus, i m
removal of an entire pathological
structure, organ or part,
amputation amputatio, ōnis $f$
removal of an entire pathological structure, organ or part, extirpation extirpatio, ōnis $f$
replantation, the plantation of a removed part of the whole to its site again replantatio, $\overline{\text { onis }} \mathrm{f}$
resection, surgical removal of a part, usually of some magnitude, e.g. jaw, stomach, colon etc. resectio, ōnis f
results of quantitative and qualitative examination of blood, hemogram haemogramma, ătis n
retention of the menstrual flow due to congenital or acquired genital canal stenosis, cryptomenorrrhoea cryptomenorrrhoea, ae f
retina retĭna, ae f
rhinolith, a concretion in the cavity of the nose rhinolǐthus, i m
rhinopathy, any morbid condition of the nose rhinopathia, ae f
rhinoscopy, instrumental-visual examination of the nose rhinoscopia, ae f
rib costa, ae f
right dexter, tra, trum

## $\mathbf{S}$

salpingogram, the radiograph made during the radiographic visualization of the uterus and uterine tubes salpingogramma, ătis $n$
salpingopexy, surgical fixation of the uterine tube salpingopexia, ae f
sarcomatosis, the condition in which a number of sarcomata develops here and there on the body sarcomatōsis, is $f$
science studying drugs and their usage, pharmacotherapy pharmacotherapia, ae f
scientist studying normal vital processes in human organism physiolŏgus, i m
sclerodermatitis, inflammation and induration of the skin sclerodermatitits, ititdis $f$
secondary secundarius, a, um
senile senīlis, e
separation of a tissue as a result of its death, necrolysis necroly̆sis, is $f$
sialolith, a salivary calculus sialolithus, i m
simple simplex, ǐcis
somatology, branch of anthropology studying structure of human body somatologia, ae f
spasm of the caecum, typhlospasm typhlospasmus, im
specialist studying forms of life and vital organisms, biologist biolŏgus, i m
specialist studying the man in process of his evolution, anthropologist anthropolŏgus, i m
medical specialist treating
~ blood diseases, hematologist haematolŏgus, i m
$\sim$ children's diseases, pediatrician paediāter, tri m
~ ear and larynx diseases, otolaryngologist, otolaryngolŏgus, i m
$\sim$ inner organs, therapeutist therapeutista, ae m
$\sim$ mental diseases, psychiatrist psychiāter, tri m

- tumorous diseases, oncologist oncolŏgus, i m
~ tuberculosis, phthisiologist phthisiāter, tri m
splenic splenǐcus, a, um
splenohepatomegaly, enlargement of the spleen splenohepatomegalia ae f spondylopathy, any disease of the vertebrae spondylopathia, ae f
spongiform, having resemblance a sponge spongiformis, e
a state in which most of the teeth are lacking, oligodentia oligodentia, ae f
a state in which there are too few erythrocytes, erythropenia erythropenia, ae f
stenosis, narrowing or stricture of an orifice or of the lumen of a hollow or tubular organ stenōsis, is f
stomach gaster, tris $f$
stomatology, branch of clinical medicine treating diseases of the oral cavity stomatologia, ae $f$
stomatītis, inflammation of the oral cavity, stomatītis, itǐdis f
subacute, (disease) running a moderately rapid and severe course for which the word acute would not be appropriate subacūtus, a, um
subcutaneous subcutaneus a, um
a sudden blocking of a blood vessel, usually an artery, by the emboli, thromboembolism thromboëmbolismus, i m
superficial superficiālis, e
suppurative, pus-forming suppuratīvus, a, um
surgical operation on the small structures with the aid of
a microscope, microsurgery
microchirurgia, ae f
symblepharon, adhesion of the eyelid to the eyeball symblephăron, in
symptom, the consciousness of a disturbance in a bodily function symptōma, ătis n
syndrome, a distinct group of signs which form a characteristic clinical picture of the disease syndrŏmum, in
synphalangism, a condition in which the joints of certain fingers or toes are fused synphalangismus, i m


## T

tachyphagia, abnormal quickness
in eating, tachyphagia tachyphagia, ae $f$
tendon tendo, ǐnis m
tenodesis, operative fixation of a tendon tenoděsis, is f
the presence of air or gas within
a thorax, pneumothorax pneumothōrax, ācis m
the presence of blood in the tympanic cavity, haemotympanum
haemotympănum, in
the presence of blood in the urine, haematuria haematuria, ae f
the production and evolution of
form, morphogenesis
morphogeněsis, is $f$
the production of urinary calculi and
the morbid state due to the presence of calculi in the urinary
system, urolithiasis urolithiăsis, is $f$
the rash or eruption on the mucous
tissue, enanthema enanthēma, ătis n
the surgical establishment of
a permanent or semipermanent
opening into the urinary
bladder, cystostomy
cystostomia, se f
therapeutist, specialist for treating diseases of inner organs therapeutista, ae $m$
thoracometry, measurement of the size of the thorax thoracometria, ae f
thromboembolism, a sudden blocking of a blood vessel, usually an artery, by the emboli thromboëmbolismus, i m
tenolysis, the freeing of a tendon from adhesions tenoly̆sis, is $f$
thrombosis, intravascular coagulation during life producing a thrombus thrombōsis, is $f$
tissue textus, us $m$
tomography, body-section radiography tomographia, ae f
tonsillitis, inflammation of the tonsil tonsillītis, itǐdis f
tonsillotomy, the surgical operation for removal of a part of a tonsil tonsillotomia, ae $f$
topography, the anatomical description of any particular part of the body topographia, ae $f$
topophobia, unreasoning fear of certain places topophobia, ae f
total or partial surgical removal of diseased lung tissue, pneumonectomy pneumonectomia, ae f
toxicosis, the pathological condition caused by
the absorption of poisons toxicōsis, is f
transfusion, the introduction of sterile fluids such as blood, plasma, serum and other solutions into the blood vessels of the circulatory system transfusio, ōnis f
transplantation, the operation of transference of a tissue or an organ from one place to an other with the aim of improving or renewing the function transplantation, ōnis f
traumatic traumatǐcus, a, um
treatment by means of medical plants, phytotherapy phytoterapia, ae f
treatment by means of natural or artificial physical factors, physiotherapy physiotherapia, ae f
tuberculosis tuberculōsis, is f
a tumor consisting of connective tissue element, desmoneoplasm desmoneoplasma, ătis n
typhlocele, a hernia involving the caecum typhlocēle, es f

## U

ulceration, the process of formation of an ulcer ulceratio, ōnis $f$
ultrasonic, ultrasound ultrasonarius, a, um urethritis, inflammation of the urethra urethritis, itĭdis $f$ use of cold or freezing as a therapeutic measure, cryotherapy cryotherapia, ae f

## V

viral virālis, e

## X

xerostomia, dryness of the mouth due to failure of the salivary gland xerostomia, ae $f$
the X-ray examination of the great vessels and the chambers of the heart, angiocardiography
angiocardiographia, ae $f$
the X-ray examination of breast, mammography mammographia, ae $f$

## W

a watery effusion into the cavity
of a joint, hydrarthrosis
hydrarthrōsis, is f
wound vulnus, ěris n

## THE INTERNATIONAL STUDENTS' ANTHEM "GAUDEAMUS"

Gaudeāmus igĭtur, Juvěnes dum sumus! Post jucundam juventūtem, Post molestam senectūtem Nos habēbit humus. (bis)

Ubi sunt qui ante nos In mundo fuēre?
Transeas ad supěros, Transeas ad infěros, Hos si vis vidēre. (bis)

Vita nostra brevis est, Brevi finiētur: Venit mors velocǐter, Rapit nos atrocĭter, Nemĭni parcētur. (bis)
Vivat Academia!
Vivant professōres!
Vivat membrum quodlĭbet,
Vivant membra quaelĭbet,
Semper sint in flore! (bis)

Vivant omnes virgines,
Gracǐles, formōsae!
Vivant et muliěres, Teněre, amabĭles, Bonae, laboriōsae. (bis)

Vivat et Respublĭca
Et qui illam regunt!
Vivat nostra civitas,
Maecenātum carĭtas,
Qui nos hic protēgunt! (bis)
Pereat tristitia,
Pereant dolōres!
Pereat diabŏlus,
Quivis antiburschius
Atque irrisōres! (bis)

Let us rejoice therefore
While we are young!
After a pleasant youth, After a trobling old age The earth will have us.

Where are they who before us
Were in the world?
You may go up to the gods,
You may cross into the underworld, If you wish to see them.

Our life is brief,
It will shortly end:
Death comes quickly, Snatches us cruelly, It spares no one.

Long live the academy!
Long live the teachers!
Long live each student!
Long live all students!
May they always florish!
Long live all girls, Slender and beautiful! Long live wives as well, Tender, loveable, Good and productive.

Long live the state as well
As they who rule it!
Long live our city
[And] the charity of benefactors
Who protect us here!
Let sadness perish,
Let sorrows perish!
Let the devil perish,
Let [perish] whoever who is anti-student As well those who mock us!

## LATIN PROVERBS AND QUOTATIONS

1. Aes debitōrem leve, grave inimīcum facit
2. Amīcus certus in re incerta cernǐtur
3. Amor non est medicabřlis herbis
4. Amor tussisque non celantur
5. Aquîla muscas non captat
6. Arte et humanitāte, labōre et scientia
7. Audiātur et altěra pars
8. Aurōra Musis amīca
9. Bis dat qui cito dat
10. Bona valetūdo melior est quam maxı̆mae divitiae
11. Cogitatiōnes posteriōres saepe sunt meliōres
12. Cogĭto ergo sum
13. Consuetūdo est altěra natūra
14. Copia non est inopia
15. Cum promisěras, facias
16. De gustíbus non est disputandum
17. De mortuis aut bene aut nihil
18. Diabŏlus non est tam ater, ac pingĭtur
19. Dictum - factum
20. Dies levat lucrum
21. Divǐde et impěra
22. Domus propria domus optĭma
23. Dum spiro spero
24. Duos qui lepōres sequĭtur, neutrum capit
25. Dura lex sed lex

26 Experientia est optĭma magistra (=Usus est optĭmus magister)
27. Ebriĕtas est voluntaria insania
28. E cantu dignoscǐtur avis
29. Equi donāti dentes non sunt inspiciendi
30. Errāre humānum est
31. Est avis in dextra melior guam quattuor extra
32. Facǐle dictu, difficǐle factu
33. Facta, non verba
34. Festīna lente

If you want to keep a friend, never borrow, never lend
A friend in need is a friend indeed
No herb will cure love
Love and cough cannot be hidden
An eagle doesn't catch the flies
By art and humanity, by labor and knowledge
Let's hear the opposite side!
He that will thrive, must rise at five
He gives twice who gives in a trice
Good health is above wealth
Second thoughts are the best

I think, therefore I am
Custom is second nature
Store is no sore
Promise is a debt
Tastes are not to be argued
Speak nothing but good of the dead
The devil is not so black as he is painted
Said and done
Time heals most sorrows
Divide and rule
My house is my castle. (East or west, home is best)
As long as I breathe, I hope
If you run after two hares, you will catch neither
The law is the law and must be obeyed
Experience is the best teacher
Drunkenness is nothing but voluntary madness
A bird may be known by its song
Don't look a gift horse in the mouth
It's human to err
A bird in the hand is worth one hundred in flight
Easier said than done
Better to do well than to say well
Make haste slowly
35. Finis corōnat opus
36. Fronti nulla fides

37 Fortes fortūna adjŭvat
38. Hominnes amplius oculis credunt quam auribus
39. Homo a se ortus
40. Homo doctus in se divitias habet
41. Homo est anĭmal sociāle
42. Homo homĭni lupus est
43. Homo propōnit, sed Deus dispōnit
44. Homo sum, humāni nihil a me alienum esse puto
45. Ignorantia non est argumentum
46. In medio stat virtus
47. Ira furor brevis est
48. Labor et patientia omnia vincunt
49. Mala herba cito crescit
50. Manus manum lavat
51. Mare verbōrum, gutta rerum
52. Medĭcus curat, natūra sanat
53. Mens sana in corpŏre sano
54. Nemo sine vitio est
55. Ne diffẽras in crastīnum
56. Ne noceas, si juvare non potes
57. Nomen est omen
58. Ne Juppiter quidem omnĭbus placet
59. Nihil volenti difficǐle est
60. Non est fumus absque igne
61. Non est via in medicīna sine lingua Latīna
62. Non scholae, sed vitae discĭmus
63. Nulla aetas ad discendum sera
64. Nulla regŭla sine exceptione
65. Nulla dies sine linea
66. Nullum malum sine aliquo bono
67. Omnia fluunt, omnia mutantur
68. Omnia mea mecum porto
69. O tempŏra, o mores!
70. Otium post negotium

All is well that ends well
Appearences are deceitful
Fortune favours the brave
A picture is worth a thousand words
A self-made man
The wealth of the mind is the only true wealth
Man is by nature a political animal
Man is a wolf to man
Man proposes but God disposes
I am a man, I count nothing human alien to me
Lack of knowledge is no excuse
(=Ignorance is no argument)
Virtue stands in the middle
Anger is short madness
Diligence is the mother of success
Great weeds grow apace
One hand washes the other
Great boast, small roast
The physician heals, nature convalesces
A healthy mind in a healthy body
No one is without a fault
Never put off till tomorrow what you can do today
Do no harm, if yon can not help
The name is the sign
He who pleased everybody died before he was born
Anything is possible if you wish hard enough
There is no smoke without fire
There is no way in medicine without Latin
We learn not for school but for life
It is never too late to learn
There is no rule without exception
Not a day without a line
No great loss without some small gain
Everything flows and everything changes
All I have, I carry with me
What times! What customs!
Work done, have your fun
71. Pacta sunt servanda
72. Paulātim summa petūntur
73. Per aspěra ad astra
74. Pigritia est mater vitiōrum
75. Plenus venter non studet libenter
76. Potius sero quam nunquam
77. Primum noli nocēre
78. Principium dimidium totīus
79. Procul ex ocŭlis - procul ex mente
80. Quem Deus perděre vult, dementat prius
81. Quidquid latet apparēbit
82. Quidquid Latīne dictum sit, altum vidētur
83. Qui non est nobiscum adversus nos est
84. Qui quaerit, repěrit
85. Qui scribit, bis legit
86. Qui semĭnat mala, metet mala
87. Qui tacet consentīre vidētur
88. Quod erat demonstrandum
89. Quod licet Jovi, non licet bovi
90. Quot capĭta, tot sententiae
91. Radīces litterārum amārae, fructus dulces
92. Repetitio est mater studiōrum
93. Saltāre ad tibiam alicūjus
94. Scientia potentia est
95. Scio me nihil scire
96. Sero venientïbus ossa
97. Sine ira et studio
98. Sine labōre non erit panis in ore
99. Si vis amari, ama!
100. Suae quisque fortūnae faber est
101. Sudōre et sanguinne, opera et studio
102. Suis quaeque temporíbus
103. Suum cuīque
104. Tamdiu discendum est, quamdiu discendum vivis
105. Tantum possŭmus, quantum scimus
106. Temperantia est custos vitae
107. Tempŏra mutantur et nos mutāmur in illis

Agreements should be obeyed
Learn to creep before you leap
Through the thorns (hard-ships)
to the stars!
Idleness is the mother of all evil
A filled stomach is deaf to learning
Better is late than never
First, do no harm
Well begun is half done
Out of sight, out of mind
Whom God wishes to ruin, he first
deprives him of reason
What is done by night appears by day
Anything said in Latin sounds profound
He that is not with us is against us
He will find who is searching
He who writes reads twice
The ill you do will rebound upon you
Silence gives consent
Which was to be proved
What Jupiter is allowed to do cattle are not
So many men, so many minds
Whatever is good to know is difficult to learn
Repeating is the mother of learning
To dance after sambody's tune
Knowledge is power
I know that I know nothing
There is nothing left for the late-comers
Without ill-will and without favor
No pains, no gains
To be loved, love!
Each man is the maker of his own
fortune
By blood, toil, tears and sweat
There is a time and place for everything
To each his own
Live and learn
We can do as much as we know
Excesses destroy our powers
The times change and we are changing with them
108. Tempǒris filia verǐtas
109. Totus mundus agit histriōnem
110. Ubi concordia ibi victoria
111. Umbram suam timēre
112. Una hirundo non facit ver
113. Ut salūtas, ita salutaběris
114. Verba docent, exempla trahunt
115. Verum amīcum pecunia non parābis
116. Vincuntur molli pectŏra dura prece
117. Vox popŭli - vox Dei

Truth is a daughter of time All the world's a stage
Where is the unity, there is the victory
He is afraid of his own shadow
One swallow makes no summer
As the call, so the echo
Words are teaching, examples are pulling
Money cannot buy friendship
A word warmly said gives comfort even to a cat
The voice of the people is the God's voice

## MEDICAL PROFESSIONAL EXPRESSIONS

1. Abactus venter Artificially induced abortion
2. Abalienatio mentis Insanity; mental derangement
3. Ad aurem (ad aur.) At the ear
4. Ad libĭtum (ad lib.) At pleasure, freely
5. Ad usum externum To be taken externally (internally);
(internum) for external (internal) use
6. Alienatio partis Gangrene
7. Alternis diēbus (alt. d.) Every other day
8. Alternis horis (a. h.) Every other hour
9. Ante meridiem (a. m.) Morning, before noon
10. Ante mortem Before death
11. Ante partum Before childbirth
12. Ante prandium (a. p.) Before dinner
13. Auris dextra (a. d.) Right ear
14. Auris laevis (sinistra) Left ear (a. 1., a. s.)
15. Aures utraequae Both ears
16. Bipăra A woman who has had born two children at separate births
17. Bis in die (b. i. d.) Twice a day
18. Compos mentis Of sound mind
19. Dolōres vagi Wandering pains
20. Facies hippocratǐca The appearance of a dying person described by Hippocrates: a pale or livid face with dull sunken eyes, pinched nose, hollow cheeks and temples, open mouth and dropped lower jaw
21. Habĭtus aegrōti The general physical appearance of a diseased person; habit
22. Horrǐda cutis Goose flesh
23. Impotentia coëundi
24. Impotentia erigendi

Sexual impotence in the male
Sexual impotence due to lack of the power of erection of the penis
Inability to reproduce
At the instant of death
At the point of death

1. In the normal, natural or original position
2. In a given place

Among the other
Within the uterus
In a vacuum
Within a glass vessel; applied to changes taking place in the test-tube method of investigation
Within the living organism
During life
A medical practitioner who acts as deputy for another
The place of least resistance (an organ or tissue most likely to be a particular disease)
A teratism or other freak of nature
Diphtheria (literally - Egyptian evil)
Senile arteriosclerosis (literally - senile evil of arteries)
Epilepsy (literally - falling evil)
Syphilis (literally - venereal evil)
The auditory threshold; the least sound that can be heard
43. Minĭmum cognoscibĭle The visibility threshold for recognizing shapes
44. Minĭmum sensibĭle The threshold of consciousness
45. Muscae volitantes The appearance in the fields of vision of variously shaped figures caused by defect of the vitreous humor (literally - flying flies)
46. Noli - me - tangĕre An old but colorful name for rodent ulcer (literally - do not touch me)
47. Non compos mentis A person who is not sufficiently sound of mind to manage his own affairs
48. Nostrum A quack remedy or a medicine the ingredients of which are kept secret
49. Nullipăra A woman who has not given birth to a child
50. Ocŭlus dexter Right eye
(OD, o. d.)
51. Omnǐbus alternis horis Every other hour (o. alt. hor.)
52. Omni mane (o. m.) Every morning
53. Omni nocte (o. n.) Every night
54. Per rectum (p. r.) Per rectum (through the rectum)
55. Post meridiem (p. m.) Evening or afternoon
56. Post mortem After death
57. Post partum

After childbirth
58. Post prandum After dinner
59. Potentia coëundi The capacity to have sexual intercourse
60. Potentia concipiendi The capacity to conceive
61. Potentia generandi The power to beget children
62. Primigravĭda One who is pregnant for the first time
63. Primipăra A woman who has had one child
64. Prognōsis anceps An uncertain prognosis
65. Prognōsis fausta A good prognosis
66. Prognōsis infausta An unfavorable prognosis
67. Prognōsis quoad vitam An opinion as to whether the patient will live
68. Pro ratiōne aetātis According to age p.r. aet.)
69. Pro re nata (p. r. n.) Occasionally, when required
70. Pubertas plena The attainment of full sexual maturity
71. Pubertas praecox Puberty occurring at an abnormally early age
72. Quantum libet As much as you please (=quantum placet)
73. Quaqua hora (q. q. h.) Every hour
74. Quater in die (q. i. d.) Four times a day
75. Secundigravĭda A woman who is pregnant for the second time
76. Secundipăra A woman who has had 2 children, in two different pregnancies
77. Status asthmatĭcus A severe and continuous attack of asthma in which there is marked dispnoea and finally exhaustion and collaps
78. Status convulsīvus sive Repeated and prolonged epileptic seizures without epileptĭcus recovery of consciousness between attacks
79. Status praesens The present condition
80. Ter de die (t. d. d.) Thrice a day
81. Unipăra A woman who has given birth once only
82. Vix conservātrix The innate strength of an organism enabling it to withstand disease
83. Vix medicātrix natūrae The natural ability of the organism to prevail over disease without external assistance
84 Vis vitae (vitālis) The life force

## LITERATURE

1. Англо-русский медицинский словарь : более 90000 терминов / сост. : И. Ю. Марковина, Е. В. Бабченко, З. К. Максимова и др.]. М.: Медицинское информационное агенство, 2008. 896 с.
2. Волмянская, О. А. Англо-русский словарь для специалистов-медиков / О. А. Волмянская. Минск : Асар, 2000. 304 с.
3. Капитула, Л. С. Латинский язык с основами медицинской терминологии : учеб. пособие / Л. С. Капитула. 2-е изд. Минск : БГМУ, 2003. 241 с.
4. Международная анатомическая номенклатура (с официальным списком русских эквивалентов) / под ред. Л. Л. Колесникова. М : Медицина, 2003. 424 с.
5. Русско-англо-латинский словарь крылатых слов и выражений / сост. А. С. Альбов. М. : АСТ ; СПб. : Сова, 2006. 606 с.
6. Цисык, А. З. Латинский язык : учеб. для студ. вузов / А. З. Цисык. Минск : ТетраСистемс, 2006. 448 с.
7. Arnaudov, G. Terminologia medica polyglotta. Медицинская терминология на пяти языках / G. Arnaudov. София : Медицина и физкультура, 1979. 943 с.
8. Butterworths Medical Dictionary 2nd ed. London, Boston, Sydney, Wellington, Durban, Toronto : Butterworth, 1979. 1942 p.
9. Кондратьев, Д. К. Latin and Fundamentals of Medical Terminology for Medical Students / Д. К. Кондратьев, О. Е. Вылегжанина, Ю. В. Князева. Гродно : ГрГМУ, 2005. 250 c.
10. Stadman's Medical Dictionary. 25th ed. Baltimore, Hong Kong, London, Sydney : Williams and Wilkins, 1989. 1751 p.

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