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**ENGLISH IN
MEDICAL PRACTICE**

Minsk BSMU 2021

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МИНИСТЕРСТВО ЗДРАВООХРАНЕНИЯ РЕСПУБЛИКИ БЕЛАРУСЬ
БЕЛОРУССКИЙ ГОСУДАРСТВЕННЫЙ МЕДИЦИНСКИЙ УНИВЕРСИТЕТ
КАФЕДРА ИНОСТРАННЫХ ЯЗЫКОВ

М. Н. ПЕТРОВА, Т. А. ПРОВОЛОЦКАЯ

**АНГЛИЙСКИЙ ЯЗЫК
В МЕДИЦИНСКОЙ ПРАКТИКЕ
ENGLISH IN MEDICAL PRACTICE**

Учебно-методическое пособие



Минск БГМУ 2021

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ПЗ0

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Р е ц е н з е н т ы: канд. филол. наук, доц., зав. каф. белорусского и русского языков Белорусского государственного медицинского университета Т. Н. Мельникова; каф. теории и практики английской речи Минского государственного лингвистического университета

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Представляет собой профессионально ориентированный курс обучения английскому языку специалистов медицинского профиля.

Предназначено для студентов 1-го курса лечебного, педиатрического и медико-профилактического факультетов.

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ПРЕДИСЛОВИЕ

Отбор и структурирование учебного материала, используемого в учебно-методическом пособии, обусловлен принципами практико-ориентированности, функционально-коммуникативного подхода, взаимосвязанного обучения основным видам иноязычной речевой деятельности, моделирования, вариативности и проблемности.

Разработанная система упражнений по каждой теме направлена на оптимизацию процесса усвоения предметной лексики и наиболее употребительных грамматических и речевых структур, характерных для англоязычной коммуникации. Последовательное изучение каждого тематического цикла, имеющего функциональную направленность, предполагает не только качественное освоение материала и развитие профессиональной иноязычной компетенции, но и включение обучающихся в различные виды активной речемыслительной деятельности, готовность решать коммуникативно-познавательные задачи.

MODULE ONE

Topic: Surgery.

Grammar: Perfect Tenses Passive. The Gerund and the Participle.

I. Discuss with your friend:

- what knowledge surgeons must have;
- what conditions (disorders) surgeons deal with (make a list of these conditions).

Share your ideas with the group.

VOCABULARY FOCUS

II. Learn the following words and word-combinations:

ambulance <i>n</i> to call in an ambulance	машина скорой помощи вызвать скорую помощь
appendix <i>n</i> to remove the appendix a perforated (inflamed) appendix the rupture of the appendix appendicitis	аппендикс удалить аппендикс прободной (воспаленный) аппендикс разрыв аппендикса аппендицит
bandage <i>n</i> to put a bandage on smth a tight bandage the bandage is soaked with pus (blood) to take off the outer bandage to bandage	бинт, повязка наложить повязку тугая повязка повязка пропитана гноем (кровью) снять наружную повязку перевязать
convalescent <i>n</i>	выздоровливающий
dressing <i>n</i> a sterile dressing to put a dressing on smth/around smth to remove (change) a dressing a dressing-room a dressing-table to dress the wound	повязка стерильная повязка наложить повязку на снять (сменить) повязку перевязочная стол для перевязки перевязать рану
edge <i>n</i> the edges of the wound	край края раны
extremity <i>n</i> a lower (upper, left, right) extremity an injured extremity	конечность нижняя (верхняя, левая, правая) конечность поврежденная конечность

fracture <i>n</i> a fracture of the bone a simple (compound) fracture an open (closed) fracture to set a fractured bone	перелом перелом кости простой (сложный) перелом открытый (закрытый) перелом составить сломанную кость
gauze drain to take out a gauze drain to introduce a gauze drain into the wound a gauze drain soaked with pus (blood)	марлевый тампон извлечь (вынуть) тампон ввести тампон в рану тампон, пропитанный гноем (кровью)
guidance <i>n</i> under the guidance of	руководство под руководством
handle <i>v</i> to handle smb/smth	обращаться с обращаться с кем-либо, с чем-либо
harm <i>n</i>	вред
harm <i>v</i> to harm smb/smth	повредить, вредить повредить кому-либо (чему-либо)
hurt <i>v</i> to hurt a finger (hand, arm, head) my finger (hand, arm, eye) hurts Does it hurt? Where does it hurt? It hurts here. It hurts me to walk (to speak, to cough).	ушибить, повредить, болеть ушибить палец (кисть руки, руку, голову) у меня болит палец (кисть руки, рука, глаз) Больно? Где больно (болит)? Здесь болит (больно). Мне больно ходить (говорить, кашлять).
operate <i>v</i> to operate on smb for smth to be operated on for some disease	оперировать оперировать кого-либо по поводу чего-либо быть прооперированным по поводу какой-либо болезни
operation <i>n</i> an urgent operation to perform an operation on smb for smth to undergo an operation to survive an operation(Syn.)	операция срочная операция делать операцию кому-либо по поводу чего-либо перенести, подвергаться операции перенести операцию
operative <i>a</i> operative treatment operative intervention	операционный, оперативный оперативное лечение оперативное вмешательство

operative area postoperative condition	операционное поле (область) послеоперационное состояние
outcome <i>n</i> a fatal outcome of some disease a successful (favourable) outcome	исход смертельный (летальный) исход болезни успешный (благоприятный) исход
perforate <i>v</i> perforated appendicitis (ulcer)	перфорировать, прорывать(ся) прободной аппендицит (язва)
plaster (of Paris) a plaster bandage (cast) to put a leg (an arm) in plaster (<i>часто of Paris не употребляется</i>) to apply a plaster bandage (cast) to remove a plaster bandage (cast)	гипс гипсовая повязка наложить гипс на ногу (на руку) наложить гипсовую повязку снять гипсовую повязку
soak <i>v</i> to be soaked with pus (blood)	промокнуть, пропитаться быть пропитанным гноем (кровью)
solution <i>n</i> solution of antibiotics saline solution to introduce a solution into the surgical wound	раствор раствор антибиотиков физиологический раствор ввести раствор в хирургическую рану
stitch <i>n; v</i> to put in stitches to take out stitches	шов; накладывать швы наложить швы на (рану) снять швы
stretcher cart <i>n</i> to wheel a patient on a stretcher cart to lay a patient down on a stretcher cart	каталка везти больного на каталке положить больного на каталку
suppurative <i>a</i> suppurative wound (appendicitis)	гнойный гнойная рана (аппендицит)
surgeon <i>n</i>	хирург
surgery <i>n</i> practical classes in Surgery	хирургия практические занятия по хирургии
surgical <i>a</i> a surgical department a surgical case (treatment) surgical instruments	хирургический хирургическое отделение хирургический случай (лечение) хирургические инструменты
suture <i>n</i> a long (short) suture a suture needle	шов длинный (короткий) шов игла для наложения швов

tenderness <i>n</i> tenderness on palpation (exploration)	болезненность болезненность при пальпации (обследовании)
urgent <i>a</i> an urgent operation (case, matter, measures, questions)	срочный срочная операция (случай, дело, меры, вопросы)
wound <i>n</i> the wound is healing well (slowly, quickly)	рана рана заживает хорошо (медленно, быстро)

III. Practise the pronunciation and translate the word-combinations into Russian:

- 1) to identify [aɪ'dentɪfaɪ] the problem
- 2) to determine [dɪ'tɜːmɪn] the urgency of an operation
- 3) to lie down on the couch [kaʊtʃ]
- 4) acute appendicitis [əˌpendɪ'saɪtɪs]
- 5) complicated by peritonitis [ˌperɪtə'nɑɪtɪs]
- 6) to be admitted to the traumatological [trɔːmətə'lɔdʒɪkəl] department
- 7) the fractured ['fræktʃəd] bones of the extremity [ɪks'tremɪti]
- 8) immobilization [ɪˌmɔʊbɪlaɪ'zeɪʃn]
- 9) convalescent [ˌkɒnvə'lesnt]
- 10) cholecystitis [ˌkɒlɪsɪs'taɪtɪs]
- 11) postoperative [ˌpɔʊst'ɒpərətɪv]
- 12) suppurative ['sʌpjʊrətɪv]

IV. Remember the following prepositional phrases:

- 1) to operate **on** smb **for** smth — оперировать кого-либо по поводу чего-либо
- 2) to be dangerous **to** life (**for** the patient) — быть опасным для жизни (неодуш. сущ.), для пациента (одуш. сущ.)
- 3) **under** the doctor's guidance — под руководством врача
- 4) to put **in** the stitches — накладывать швы
- 5) to take **out** the stitches — снять швы
- 6) to put the bandage **on** smth — наложить повязку на что-либо
- 7) to take **off** the bandage — снять повязку
- 8) to be soaked **with** blood — промокнуть от крови (быть промокшим от крови)

V. Match the following words with their definitions:

rupture	a patient who is recovering result, effect disruption of tissue
heal	
suppurative	

convalescent	to restore wounded parts or to make healthy
duty	producing pus
harm	obligation, responsibility
outcome	damage, cause additional pain

VI. Complete the following charts:

Noun	Adjective
	urgent
care	
practice	
	attentive
abdomen	
	surgical

Noun	Verb
	manage
	intervene
injury	
provision	
	dress
decision	
reception	
	identify

Noun	Verb	Adjective
	remove	
prevention		
		operative
addition		
	respond	

GRAMMAR PRACTICE

VII. Use a word on the right to form a suitable word that fits the gap in the same line:

1. The patient's wound has already been
2. On ... the patient complained of a sharp pain in his abdomen.
3. We are interested in ... the causes of the disease.
4. ... diagnostic tests helped to make a correct diagnosis.
5. ... of the patient should be based on the problem-oriented approach.
6. Effective ... techniques contributed to rapid and uneventful
7. The ... of general anesthesia provided a wonderful solution to the problem of pain.

- dressing**
- admit**
- determine**
- use**
- evaluate**
- operate, heal**
- introduce**

VIII. Define the tense form of the verbs. Translate the sentences:

1. We came to the hospital a little earlier than it had been appointed.
2. The condition of the patient who had been confined to bed for a month became much better.
3. In the dressing-room the surgeon took out the stitches which had been put in after the operation.
4. The urinalysis had confirmed the presence of albumin before other manifestations of renal failure were revealed.
5. After the tests had been carried out the final diagnosis was made.
6. His fractured leg had been kept in plaster of Paris until it healed.
7. The most significant aspects of surgical practice have been discussed at the conference lately.
8. Hemorrhage, infection and pain had been the surgeon's daily nightmares (κοшмар) for centuries and made all surgical procedures not only difficult but also dangerous.
9. The bleeding has already been arrested.

IX. Choose the correct verb form:

1. The stitches _____ by the surgeon yet.
 - a) weren't taken out
 - b) aren't taken out
 - c) haven't been taken out
2. He _____ the Head of the surgical department a month ago.
 - a) is appointed
 - b) was appointed
 - c) has been appointed
3. Disinfectants _____ by the doctors for nearly one century.
 - a) were used
 - b) are used
 - c) have been used
4. The patient just _____ to the operating-room.
 - a) has taken
 - b) was taken
 - c) has been taken
5. Many new antibiotics _____ since World War II.
 - a) were discovered
 - b) had been discovered
 - c) have been discovered
6. Two new patients _____ to the surgical department yesterday.
 - a) had been admitted
 - b) have been admitted
 - c) were admitted

7. Lately some changes _____ into the health care system to provide more effective medical care.
 - a) were introduced
 - b) had been introduced
 - c) have been introduced
8. By the time the patient's parents arrived at the hospital he _____.
 - a) was operated on
 - b) has been operated on
 - c) had been operated on
9. Our abilities to diagnose and treat diseases _____ recently.
 - a) improved
 - b) have been improved
 - c) have improved
10. By 5 o'clock the experiment _____.
 - a) was completed
 - b) has been completed
 - c) had been completed

X. Use the correct tense form:

1. The limbs (to examine) just by the doctor.
2. The wound (to explore) already.
3. Patient Clark (to operate on) this week.
4. The solution of antibiotics (to introduce) by the nurse before the operation began.
5. All the findings (to obtain) by 3 o'clock yesterday.
6. The patient (not to lay down) on the stretcher yet.
7. The bleeding (to arrest) before the ambulance arrived.
8. The electrocardiogram (to take) today.
9. The doctor (to determine) dull heart sounds by auscultation before the electrocardiogram was taken.
10. The surgeons (to make) many important discoveries by the beginning of the 20th century.

XI. Define participles and translate the sentences:

1. Having been operated on for acute appendicitis a month before my sister still complained of tenderness on physical exertion.
2. Examining the patient the surgeon noted swelling of the right lower extremity.
3. Being dangerous to life suppurative appendicitis must be treated in time.
4. Being questioned on his post-operative condition the patient said he had no complaints.

5. Having attended all classes in Surgery the students of our group got acquainted with the ways of treating compound fractures.
6. The recovering patient N. will be discharged in a week.
7. Having been put a fresh dressing the patient was wheeled on a stretcher cart from the dressing room.

XII. Define gerunds and translate the sentences:

1. Would you mind my taking your temperature?
2. On having taken the patient's electrocardiogram the cardiologist noted some abnormalities in its readings.
3. My father did not mind being operated on by this surgeon.
4. This convalescent cannot be discharged without being completely cured.
5. The doctor's having diagnosed suppurative appendicitis in time helped him to save the patient's life.
6. On having been operated on the patient was gradually recovering.
7. His having been treated properly and attentively enabled him to be discharged from the hospital so soon.

XIII. Choose the correct ing- form:

1. _____ on for cholecystitis eight days before he felt quite well.
 - a) having operated
 - b) being operated
 - c) having been operated
2. The patient didn't complain of any tenderness on _____ the operative area.
 - a) having explored
 - b) being explored
 - c) having been explored
3. They had to assist the doctor in _____ dressings.
 - a) having been put
 - b) being put
 - c) putting
4. _____ about the favourable results of the tests, the patient felt considerable relief.
 - a) informing
 - b) having informed
 - c) having been informed
5. _____ all the subjective and objective data the doctor made a correct diagnosis.
 - a) having been analyzed
 - b) being analyzed
 - c) having analyzed

6. _____ a course of rehabilitation therapy the patient restored all the vital functions.
- a) having been undergone
 - b) undergoing
 - c) having undergone
7. On _____ the child complained of acute pain in the right upper part of his abdomen.
- a) examining
 - b) having examined
 - c) being examined

XIV. Read the text and answer the questions that follow.

Surgery

Surgery is a highly specialized field of medicine dealing with a wide range of health problems, diseases, injuries, traumas, deformities, pathologies and birth defects, as well as the techniques and technology to treat and correct them. The problems that can be corrected by surgical intervention include appendicitis, cholecystitis, tumours, hernias, fractures, abscesses, cataracts and others.

Many students are interested in Surgery and dream of becoming surgeons after graduating from the Medical University. In the last 2 years of their studies at the University they have practical classes in Surgery when they participate in the care and management of surgical patients. Working as surgeons' assistants they acquire the necessary skills in the main aspects of surgical practice. They learn to identify the patient's problem(s), assess the patient's condition, determine the urgency of surgical intervention, make a decision and develop of a proper treatment plan.

One of my friends who is a senior student of our University is also eager to become a surgeon. Their group has already had their classes in Surgery at the departments of Emergency and Planned Surgery of City Hospital # 3. They have already been taught to put dressings and manage the surgical patients. They have also been provided with some information on pain control, fluid supply, replacement of blood loss and adequate nutrition for surgical patients.

My friend told me a lot about their work at the hospital. Once he had to be on duty in the admission department. Being very responsible and eager¹ to apply his knowledge in practice he came there a little earlier than it had been appointed to learn more about his duties. He had to help the doctor and the nurse with questioning patients and filling in their case histories. He had to follow the main rule: not to cause patients any additional pain, not to harm them, that's why he had to be very careful in handling patients.

One of the patients was a 12-year old boy who was brought to the hospital by an ambulance. On admission he complained of a severe pain in the right lower part of his abdomen. The doctor asked the boy to lie down on the couch

and began his examination by palpating the patient's abdomen. He made the diagnosis of acute appendicitis. Acute appendicitis is sometimes extremely dangerous to life and its onset is often very sudden. In some cases of acute appendicitis perforated forms complicated by peritonitis may be observed.

That's why the surgeon directed the boy to the department of emergency surgery for being operated on at once. It was necessary to remove the appendix immediately and prevent its rupture which might cause peritonitis.

The students also participated in the morning rounds of the surgical department and followed the doctor in charge. They were taken to some of the wards of the traumatological department where they examined some patients with fractures. The fractured bones of their extremities had been set and put in plaster and the patients had been confined to bed for several days. Before the students came to this department they had already been instructed in anesthesia fundamentals², the use of antimicrobial agents and the main principles of patient management in the postoperative period.

Under the doctor's guidance they got acquainted with the methods of immobilization of extremities and learned that closed and simple fractures healed quicker than open and compound ones. They also examined the convalescents who had fractures of lower extremities. All of them were going to be discharged from the hospital in the near future because they felt quite well.

In the dressing-room the students had to assist the surgeon in putting dressings. They also watched how the surgeon was examining some patients. The first patient had been operated on for cholecystitis 8 days before. His postoperative condition was good and the wound was healing well. The surgeon took out the stitches which had been put in after the operation. It didn't hurt the patient³. The suture was about 10–12 cm long and the patient didn't complain of any tenderness on being explored the operative area. The surgeon hoped to discharge this convalescent from the hospital in about a week.

Another patient, who had been operated on for acute suppurative appendicitis, was wheeled on a stretcher cart to the dressing-room. The surgeon took off the outer bandage⁴, examined the wound in the patient's abdomen and carefully took out the gauze drain soaked with pus. On having washed the edges of the operative wound the surgeon administered the solution of antibiotics into the wound and put a new dressing and an outer bandage on the wound.

To ensure success of surgical procedures surgeons should possess deep knowledge of anatomy, physiology, immunology, pathology, wound healing, intensive care etc. They should also have a high degree of manual dexterity⁵, good hand-eye coordination⁶ and excellent visuospatial⁷ understanding (competence). In addition, they should follow the established surgical techniques, ensure sterility in the operating room⁸ and coordinate activities of the surgical team effectively.

NOTES

¹ to be eager to do smth	очень хотеть чего-либо, стремиться
² anesthesia fundamentals	основы анестезии
³ it didn't hurt the patient <i>to hurt</i> <i>it hurts me</i> <i>It hurts me to swallow.</i>	пациенту не было больно повредить, причинить боль, ушибить мне больно Мне больно глотать.
I hurt my leg when I fell down. <i>Does it hurt you here?</i>	Я повредил (ушиб) ногу, когда упал. Вам здесь больно?
⁴ to take off the outer bandage <i>to put (apply) a bandage/dressing on smth or around smth</i> <i>A dressing is applied directly to a wound to promote healing.</i> <i>A bandage is used to hold (support) a dressing in place. Bandages usually cover gauze dressings</i> <i>to take off (change) a dressing</i> <i>to dress the wound</i> <i>The bandage was soaked with pus and blood and the nurse changed the dressing.</i>	снять наружную повязку наложить повязку на снять (сменить) повязку перевязать рану Бинт был пропитан гноем и кровью, и сестра сменила повязку.
⁵ manual dexterity	мануальная ловкость
⁶ hand-eye coordination	зрительно-моторная координация
⁷ visuospatial	зрительно-пространственный
⁸ the operating-room <i>operating-table</i> <i>operating nurse</i> <i>operating microscope</i> <i>operative wound</i> <i>operative field (area)</i> <i>operative techniques</i>	операционная <i>Причастие от глагола to operate — operating — встречается в таких сочетаниях, как:</i> операционный стол операционная сестра операционный микроскоп <i>Прилагательное этого корня operative встречается в следующих сочетаниях:</i> операционная рана операционное поле операционные методики, методы

<i>post-operative condition</i>	<i>NB! Не путать со словом техника — machinery</i>
<i>post-operative course</i>	послеоперационное состояние послеоперационное течение

XV. Answer the questions based on text:

1. What are the main aspects of surgical practice?
2. What skills do medical students acquire during their practical classes in surgery?
3. What information are they usually provided with before they go to the in-patient surgical department?
4. What did they have to do in the admission department?
5. Why did they have to be very careful in handling patients?
6. What complications may acute appendicitis cause?
7. Why is it necessary to remove the inflamed appendix immediately?
8. What patients did the students deal with at the traumatological department?
9. What had the students been instructed in before they went to the traumatological department?
10. What did the students get acquainted with under the doctor's guidance?

LANGUAGE DEVELOPMENT

XVI. Spot 6 sentences with Perfect Passive tense forms in the text.

XVII. Find English equivalents for the following word combinations and sentences:

- 1) жаловаться на сильную боль в правой нижней области живота;
- 2) начало острого аппендицита часто бывает внезапным;
- 3) удалить аппендикс;
- 4) предотвратить разрыв;
- 5) острый гнойный аппендицит;
- 6) прооперировать по поводу холецистита;
- 7) пациенту не было больно;
- 8) закрытые и простые переломы;
- 9) открытые и сложные переломы;
- 10) нижние (верхние) конечности;
- 11) наложить гипс на сломанную конечность;
- 12) рана заживала хорошо;
- 13) больной не жаловался на болезненность
- 14) снять наружную повязку;
- 15) извлечь марлевый тампон, пропитанный гноем;
- 16) хирург снял швы;
- 17) выздоравливающие.

XVIII. Fill in the missing words. Choose from the following:

cholecystitis	wound	removed
convalescent	bleeding	filled in
guidance	confined	survived
stitches	hurts	outer

1. It was a severe case of profuse abdominal
2. The patient ... the operation well.
3. Under the doctor's ... the students ... the patients' case histories.
4. This ... has just been discharged.
5. The patient has survived the operation for
6. The nurse has ... the dressing carefully.
7. It ... when I move my arm.
8. The disease has ... him to bed for 10 years.
9. The nurse has put a new ... bandage on the patient's
10. The surgeon has taken out the ... today.

XIX. Fill in the blanks with prepositions where required:

1. Ten days ago when my fellow student and I were going ... home ... classes, he felt a sudden sharp pain ... his abdomen. We stopped for a while and the pain subsided. But when we came ... the hostel my fellow student began to complain ... a severe pain ... the right lower part ... his abdomen again. The pain was so severe that we had to call ... an ambulance. The ambulance arrived ... 15 minutes. When the doctor examined him he made the diagnosis ... acute appendicitis, which required ... an urgent operation. So, unexpectedly my fellow student was operated ... The operation ... appendicitis was performed successfully. The wound healed well and the stitches were taken ... seven days later. My fellow student was discharged ... the hospital ... a good state and now he is quite well.
2. Surgeon Ivanov successfully performed an operation ... a kidney trouble.
3. It is dangerous ... you to run quickly now as you were operated appendicitis only two weeks ago.
4. ... 10 p. m. the ambulance brought a patient ... a very bad state. It turned ... that he had a compound fracture ... both lower extremities. The man was laid a stretcher cart and wheeled ... the operating-room.
5. My sister is ill ... quinsy. She has to undergo an operation ... her tonsils and have them removed.
6. The wound ... the boy's arm was bleeding so much that the nurse had to put ... a new dressing.
7. Your broken leg will have to be kept ... plaster ... Paris until it heals.
8. My brother often complains ... a sharp pain ... his stomach. I'm afraid something is wrong ... it.

9. ... how many days has this patient been lying ... traction?
10. The edges ... the wound were suppurative and it was necessary to wash ... the wound ... the solution ... antibiotics.

XX. Define the ing-forms. Translate the sentences into Russian:

1. On examination food poisoning was diagnosed.
2. Returning home from his work on the day previous to the onset of his illness the man felt a bad headache and chill (озноб). In the morning feeling an increasing chill accompanied by elevated temperature, he stayed in bed.
3. After my brother's recovery the doctor advised him to avoid catching a cold.
4. Rapid walking, running, jumping, heavy lifting and swimming or any muscular exertion accelerate the respiratory rate for some time.
5. Palpation is the way of examining an underlying inner organ by feeling with the hand or fingers the overlying surface.
6. Healing does not occur until infection subsides.
7. Healing wounds seldom bleed.
8. Chest trauma may do a great deal of impairment causing profuse bleeding, either external or internal.

XXI. Transform the sentences using the Gerund or the Participle:

1. The new methods of immobilization of the limbs which the young surgeon recommended were very effective.
2. When we attend the lectures of this professor we learn a lot about the management of surgical patients.
3. The surgeon who is performing the operation now is a skillful and experienced professional (specialist).
4. The gauze drain which the doctor took out of the wound was soaked with pus.
5. Would you mind if I take your blood pressure?
6. After the patient had been operated on, he began recovering gradually.
7. This convalescent cannot be discharged if he (she) isn't completely cured.
8. We cannot develop our professional abilities if we don't pay attention to increased medical knowledge and technological advances.
9. After he had taken part in the Congress of surgeons he got a better understanding of certain surgical problems.

XXII. Ask questions for information:

- a) The patient complained of a severe pain in his abdomen. (What ... ?)
- b) He was operated on for appendicitis 5 days ago. (When ... ?)
- c) The doctor determined dull heart sounds by auscultation. (How ... ?)

- d) This patient has recently undergone the operation on the lung. (What kind of operation ... ?)
- e) Laboratory examination showed elevated cholesterol. (What ... ?)
- f) The electrocardiogram will be taken tomorrow. (When ... ?)

XXIII. A) Read the following story and report what you've learnt:

Lynne Williams is 30. She has always thought of herself as a healthy person but a few days ago she started getting pains in her stomach. At first it was a slight pain in her side and it didn't hurt very much. Lynne thought she would be all right soon. But the pain grew worse. Lynne was sick several times and had an elevated temperature. Finally, she decided to call in a doctor. The doctor examined her and diagnosed appendicitis. He said she had to go into hospital immediately and have her appendix removed.

B) Answer the questions on the story:

1. Why did Lynn call in a doctor?
2. What was wrong with her?
3. Why did she have to go into hospital?

XXIV. Practise the conversation between Lynn and her friend. Work with a partner and act out a similar conversation choosing from the words and expressions in the box below:

Friend: What's the matter?

Lynn: I think it's all right. Just a slight pain in my side.

Friend: Why don't you sit down for a moment?

Lynn: No, don't fuss. It doesn't hurt very much. I'll be all right in a minute.

What's happened?	in my shoulder	There's nothing to worry.
Is anything wrong?	in my ankle	I don't think it's too serious.
What's up?	in my foot	I don't feel too bad.
What troubles you?	in my heart	I think the pain is subsiding.

XXV. Complete Lynne's part of her conversation with the doctor. Read it in pairs:

D: Now, Mrs. Williams. What seems to be the matter?

L: _____

D: Let me have a look. Mm ... Does it hurt when I press here?

L: _____

D: When did this pain start?

L: _____

D: Have you been sick at all?

L: _____

D: Are you running a temperature?

L: _____

D: Well, I'm afraid you've got appendicitis. We must get you into hospital at once and have the appendix removed.

XXVI. Role-play.

You have learned that your friend was taken to hospital. You call his/her parents and ask them about the details.

XXVII. Read the information. Point out the discoveries mentioned. Comment on their importance:

The development of surgery in the 19th century was filled with discoveries and advances which were essential for the future of medicine. One of the most remarkable achievements was the introduction of general anesthesia by William Morton who demonstrated the use of anesthesia for a painless dental extraction at Massachusetts General Hospital in Boston in 1846. Hemorrhage, infection and pain had been the surgeon's daily nightmares for centuries and made all surgical procedures not only difficult but dangerous. The introduction of general anesthesia provided a wonderful solution to the problem of pain.

Another notable event was the publication of Virchow's Cellular Pathology in 1858, which provided the basis for understanding the cellular origin of disease. In 1867 the British surgeon Joseph Lister developed antiseptic surgery concepts and became a pioneer in preventive medicine. His antiseptic principles are the basis of modern infection control that make surgery safe.

In 1895 Wilhelm Roentgen discovered X-rays which was another significant sign of medical advance. The use of X-rays has become an important medical diagnostic tool.

XXVIII. Work with a partner. Interview him/her about the development of surgery in the 19th century.

XXIX. Study the list of names of great scientists in the field of medicine. Share the facts that you know about their achievements:

William Morton	1846
Rudolf Virchow	1858
Joseph Lister	1867
Robert Koch	1882
Dmitry Ivanovsky	1892
Willhelm Roentgen	1895

XXX. Answer the following questions:

1. When was general anesthesia introduced into surgical practice? What was its significance?

2. Who discovered the causative agent of tuberculosis?
3. Why is the development of antiseptic surgery principles really crucial?
4. What contributed to better understanding of the cellular origin of disease?
5. What has become an important diagnostic tool used up to now?

SELF-STUDY MATERIAL

Read the text about modern surgery. Add more facts about its successful development in the 20th–21st centuries based on your online research.

Modern Surgery

Advances in modern surgery are almost incredible. In the 20th century antibiotics, kidney dialysis to clean the blood of poisons at regular intervals, heart-lung machine (cardiovascular bypass pump to keep patients alive during very long operations), intravenous fluid therapy, radical surgical resections and chemotherapy were introduced into surgical practice. In the 21st century a series of breakthroughs in the field of robotic surgical technologies have been made: smart operating rooms and 3D printing were invented and successfully implemented in surgery. Operations are now being performed that were not even dreamed of 50 years ago.

The heart valves can be safely repaired or replaced with artificial substitutes. Clogged blood vessels can be cleaned out and stented. Transplantation of organs and tissues has saved and improved millions of lives throughout the world. Kidney, heart, lung and liver transplants, as well as fatty tissue transplantation have become successful treatment options for patients with advanced progressive diseases.

The scope of surgery has increased remarkably in the 21st century. The three basic principles of modern day surgery are minimally invasive, organ sparing or saving and maximally restoring. The patient advantages of such surgeries include a shorter hospital stay, less pain and a faster total recovery time.

Nowadays, surgery is advancing rapidly thanks to the new technology of 3D printing, laparoscopy, endoscopy and smart operating rooms, which improve the quality of work of health professionals and the quality of patients' lives.

Answer the questions:

1. What were the greatest achievements of the 20th century relating to surgery?
2. What breakthroughs have been made in surgery in the 21st century?
3. What kind of high-tech operations are successfully performed nowadays and help to save and improve people's lives?
4. What are the main principles of modern surgery?
5. What are the advantages of such surgery for the patient?
6. What surgical technologies improve the quality of operations?

MODULE TWO

Topic: Operation.

Grammar: Absolute Participial Construction. Complex Object.

I. Discuss with your friend:

- what principles surgeons must follow during surgical interventions;
- what equipment can be seen in the operation room.

Share your ideas with the group.

VOCABULARY FOCUS

II. Learn the following word combinations:

anesthesia <i>n</i> intratracheal (general, local) anesthesia to give anesthesia	обезболивание, анестезия внутритрахеальное (общее, местное) обезболивание давать наркоз
anesthetist <i>n</i>	анестезиолог
circulating nurse	дежурная медсестра, которая помогает открывать упаковки инструментов, проводит их подсчёт, но не ассистирует
clamp <i>n</i>	зажим
cleanse <i>v</i> to cleanse the wound (the abdominal cavity)	очистить прочистить рану (полость живота)
consciousness <i>n</i> to recover (regain) one's consciousness to lose one's consciousness loss of consciousness	сознание прийти в сознание потерять сознание потеря сознания
dome <i>n</i>	купол
drainage <i>n</i> to close the wound with (without) drainage a gauze drainage a tube drainage a drainage tube	дренаж, дренирование, осушение закрывать (зашить) рану с дренажем (без дренажа) марлевый дренаж дренаж при помощи трубки дренажная трубка
incision <i>n</i> a midline abdominal incision	разрез разрез по средней линии живота

layer <i>n</i> to close the wound in layers a thick (thin, smooth, outer) layer	слой зашить рану послойно толстый (тонкий, гладкий, внешний) слой
muscular <i>a</i> muscular pain (tissue, tension, wall, weakness, reflex)	мышечный мышечная боль (ткань, напряже- ние, стенка, слабость, рефлекс)
patch <i>n</i>	пластырь
portion <i>n</i>	часть, доля
preserve <i>v</i> preserved blood	консервировать; сохранять консервированная кровь
ready <i>a</i> to get ready for an experiment (operation) to get surgical instruments ready	готовый подготовиться к эксперименту (операции) подготовить хирургические инструменты
resection <i>n</i> to perform the resection	резекция, удаление произвести/сделать резекцию
scrub <i>v</i> to scrub one's hands with soap and brush	мыть (<i>щеткой с мылом</i>), очищать, чистить, скрести мыть руки с мылом и щеткой
a scrub nurse	медсестра, непосредственно ассистирующая хирургу
a scrub-up room <i>n</i>	предоперационная
sterile <i>a</i>	стерильный
sterilize <i>v</i>	стерилизовать
suction machine	отсасыватель
suggest <i>v</i> These symptoms suggested the presence of a foreign body in the abdominal cavity. The perforated ulcer of the stomach was suggested. He suggested discussing the plan of treatment.	предполагать; наводить на мысль (об, о); предлагать Эти симптомы наводили на мысль о наличии инородного тела в брюшной полости. Предполагалась прободная язва желудка. Он предложил обсудить план лечения.
technique <i>n</i> aseptic technique	метод, методика метод асептики
transfuse <i>v</i>	делать переливание (крови), делать вливание

transfusion <i>n</i>	переливание (крови), внутривенное вливание
turbid <i>a</i> turbid exudate (pus)	мутный мутный экссудат (гной)
uneventful <i>a</i>	без осложнений (неосложнённый), без особенностей

III. Practise the pronunciation and translate into Russian:

- 1) **symptom** ['sɪmptəm], the symptom of Stchetkin–Blumberg was clearly marked
- 2) **muscular** ['mʌskjʊlə], protective muscular tension
- 3) **dome** [daʊm], the right dome of the diaphragm ['daɪəfraem], under the right dome of the diaphragm
- 4) **sterile** ['steraɪl], to sterilize ['sterɪlaɪz], sterile caps, masks, gowns, dressings, rubber gloves
- 5) **preserve** [prɪ'zɜ:v], to transfuse preserved [prɪzə:vɪd] blood
- 6) **anaesthesia** [ˌænis'ti:zjə], intratracheal [ˌɪntrətrə'kiəl] anaesthesia, to give intratracheal anaesthesia, anaesthetist
- 7) **incision** [ɪn'si:ʒn], to make a midline abdominal incision
- 8) **laparotomy** [ˌlæpə'rɒtəmi], on laparotomy turbid ['tɜ:bɪd] exudate was revealed
- 9) **portion** ['pɔ:ʃn], the anterior [æn'tɪəriə] portion, the posterior [pɒs'tɪəriə] portion
- 10) **to cleanse** [klenz], to cleanse the wound, to cleanse the abdominal cavity from exudate
- 11) **drainage** ['dreɪnɪdʒ], to close the abdominal wound in layers without drainage
- 12) **consciousness** ['kɒnʃəsnis], to recover one's consciousness, to lose one's consciousness

IV. Remember the following prepositional phrases and give their Russian equivalents:

- 1) preparation **for** smth;
- 2) to get ready **for** smth;
- 3) **on** laparotomy;
- 4) to lift **up**;
- 5) to close the wound **in** layers;
- 6) **on** the 5th postoperative day;
- 7) **under** the surgeon's guidance.

V. Match the following words or word-combinations with their definitions:

- | | |
|------------------|--|
| 1) sterile | a) the state of being aware of smth |
| 2) anaesthesia | b) make smth (esp. the skin) thoroughly clean |
| 3) laparotomy | c) a cut into the body during surgery |
| 4) consciousness | d) free from microorganisms |
| 5) cleanse | e) controlled, temporary loss of feeling (sensation) or awareness induced for medical purposes |
| 6) incision | f) a surgical incision of the abdominal wall |

VI. Complete the following charts:

Noun	Adjective
	present
abdomen	
event	
	satisfactory
	protective
region	
trachea	
essence	

Noun	Verb
	observe
substitution	
	enter
	suggest
assistant	
	introduce
transfusion	
	recover

VII. Use the word on the right to form a suitable word that fits the gap in the same line:

- | | |
|---|---|
| 1. What are your _____ ? | complain
abdomen
conscious
admit

find
event
indicate |
| 2. The surgeon expects the _____ wound to heal well. | |
| 3. The doctor hopes this patient to recover his _____ soon. | |
| 4. On _____ she complained of a severe pain in the left shoulder. | |
| 5. The _____ of X-ray examination confirmed a fracture. | |
| 6. The patient's postoperative course was _____. | |
| 7. Severe hemorrhage may be an _____ for an urgent operative. | |

VIII. Fill in the blanks with prepositions where required:

- ... Tuesday we had our classes ... Surgery ... the surgical department ... the regional hospital. The patients are admitted ... this hospital ... different parts ... the region. Just ... our classes the helicopter landed ... the hospital yard. It turned out to be an urgent case ... perforated ulcer ... the stomach. The patient was operated ... immediately.
- The anaesthetist has got ready ... giving intratracheal anaesthesia.
- When the abdominal wound was closed ... layers ... drainage a patch was stuck ... it.
- ... laparotomy a perforated ulcer 0.2 cm ... diameter was found ... the posterior side ... the anterior portion ... the stomach.

5. The surgeon must cleanse the abdominal cavity ... exudate and food mass, introduce antibiotics ... it, and then close the abdominal wound ... layers ... drainage or ... drainage.
6. The patient's post-operative course was uneventful and ... the 12th post-operative day he was discharged ... the hospital ... good condition.

GRAMMAR PRACTICE

IX. Find Complex Object and translate the sentences:

1. I know him to be a good student.
2. The surgeon wanted us to handle the patient carefully.
3. I have never seen the wound be closed in layers.
4. The nurse made the patient lie down on a stretcher-cart.
5. She felt the pain subside.
6. We found him to have survived the operation well.
7. I would like you to follow the doctor's treatment strictly.
8. We expected the patient to have been done premedication and have been shaven the operative field.

X. Transform these complex sentences into simple ones using Complex Object:

1. I haven't seen how surgeons close wounds in layers.
2. The doctors didn't expect that the patient would recover his consciousness so soon.
3. We know that this surgeon treats perforated ulcers skilfully.
4. They did not notice how I entered the scrub-up room.
5. The surgeons expect that the patient will get ready for the operation in time.
6. The doctor considers that my eyesight is good.
7. The professor hopes that the post-operative course of this patient will be uneventful.
8. Everybody knows that rupture of the spleen is dangerous to life.
9. The surgeon believes that the patient will survive the operation well.

XI. Open the brackets using "to" where necessary:

1. The assistant helped the surgeon (to close) the wound in layers.
2. The doctor had made the nurse (to sterilize) the instruments and solutions before the operation began.
3. We expected this patient (to recover) his consciousness soon.
4. The anesthetist advised the operation (to be performed) not under general but local anesthesia.
5. We found the stitches (to have been put) very skilfully.
6. Let us (to watch) the nurses (to get) the patient ready for the operation.

7. We know the abdominal cavity (to be cleansed and washed) thoroughly in case of a rupture of the appendix.

XII. Find the Absolute Participial Construction and translate the sentences:

1. My brother having been operated on for appendicitis successfully, his post-operative condition was uneventful.
2. I felt an unbearable pain in the lower part of the abdomen, it increasing on the slightest physical exertion.
3. The patient having recovered his consciousness, the nurse was staying at his bedside.
4. Food mass and turbid exudate being found in the abdominal cavity, the surgeon cleansed it thoroughly.
5. Surgeon Belov having got ready for the operation, his assistants followed him into the operating room.
6. The presence of free gas in the abdominal cavity being revealed, a pathologic process was suggested.
7. The operating surgeon must always have the necessary set of surgical instruments, scalpels, pincers and clamps being the most important of them.
8. 500 ml of antibiotics having been introduced into the abdominal cavity, the patient was transfused preserved blood as well.

XIII. Say what is missing in the sentences and translate them:

1. The patient's condition better, he was allowed to walk.
2. The operation over, the patient was wheeled to the ward.
3. The surgeon out, I couldn't talk to him.
4. The external bleeding profuse, the patient was brought to hospital at once.
5. There no complications after the operation, the patient will be discharged soon.
6. The new surgical techniques more effective, more patients survive severe injuries.

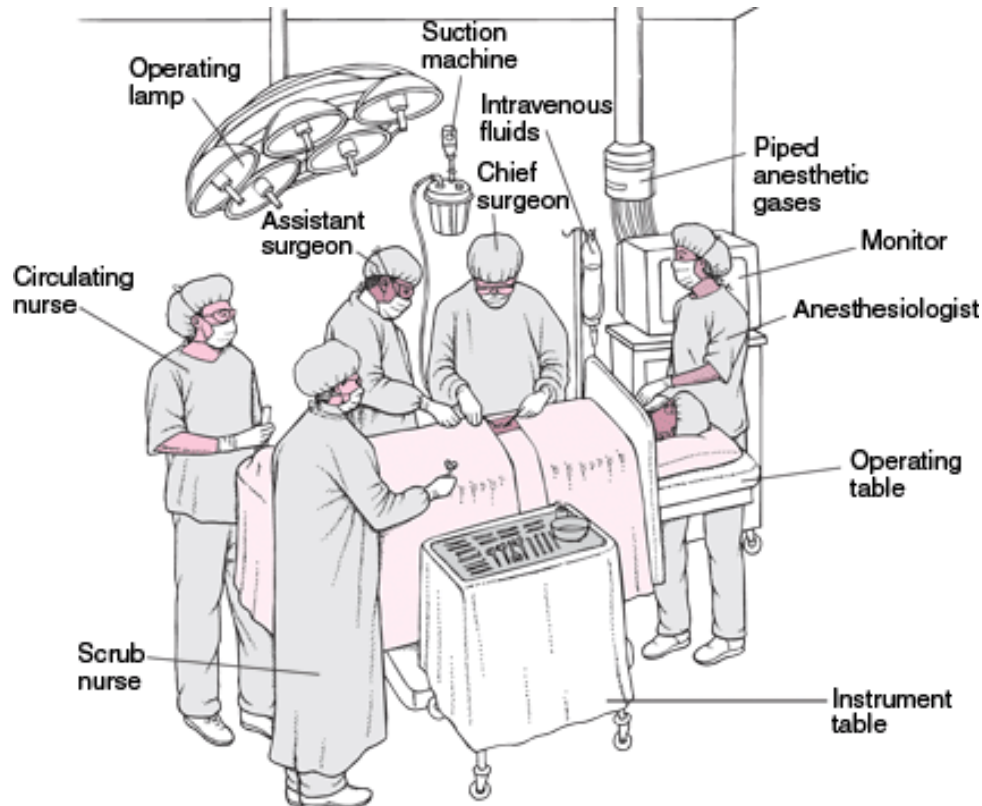
XIV. Read the text and answer the questions that follow:

Watching an operation

At a hospital modern surgery is often performed in an operating room (theater). The environment and procedures used in surgery are governed by the principles of aseptic technique: strict separation of "sterile" things from "unsterile" or "contaminated" ones. All surgical instruments must be sterilized, and an instrument must be replaced or re-sterilized if it becomes contaminated. The operating room staff must wear sterile surgical gowns, caps, masks and gloves, and they must scrub hands and arms with an approved disinfectant agent before each procedure.

The operating team consists of the following specialists:

- chief surgeon: directs the surgery;
- one or more assistant surgeons: help the chief surgeon;
- anesthesiologist: controls the supply of anesthetic and monitors the patient closely;
- scrub nurse: passes instruments to the surgeons;
- circulating nurse: provides extra equipment to the operating team.



The operating room typically contains a monitor that displays vital signs, an instrument table and an operating lamp. Anesthetic gases are piped into the anesthetic machine. A catheter attached to a suction machine removes excess blood and other fluids, which can prevent surgeons from seeing the tissues clearly. Fluids given by vein, started before the patient enters the operating room, are continued.

The other day my friend Alex was present at the operation for the first time when he was on duty at the surgical department of the Regional Hospital. At about 9 a.m. a patient who was in a poor condition was brought to the hospital by an ambulance.

In the admission department the nurse recorded the patient's initial data. Then the doctor on duty made the physical examination of the patient: examined his tongue, felt his pulse, examined and palpated his abdomen. On examination and palpation of the abdomen protective muscular tension was clearly observed. The symptom of Stchetkin–Blumburg¹ was clearly marked. The perforated ulcer of the stomach being suggested, the X-ray examination of

the stomach was made immediately. This examination revealed the presence of free gas in the abdominal cavity under the right dome of the diaphragm. The diagnosis of perforated ulcer of the stomach was clear.

The patient was wheeled on a stretcher cart to the operating-room. At that time the preparation for the operation was being carried out in the operating-room. The surgical nurse was preparing sterile gowns and dressings, the necessary set of surgical instruments and the apparatuses for blood transfusion. She was also checking up the presence and state of blood substituting solutions and preserved blood.

Alex was allowed to be present at this operation and watch its procedure. He went to the scrub-up room together with the surgeons. There he watched the surgeons get ready for the operation. First of all the surgeon and his assistants began to prepare their hands: bared their arms above the elbow, scrubbed their hands and forearms for 15 minutes with soap and brush under hot running water. Then the doctors rinsed their hands with a disinfectant, sponged them with alcohol and put on sterile caps, masks, gowns and rubber gloves.

By that time the patient had been prepared for the operation: pre-operative medications had been given, the operative field had been cleaned with an antiseptic to reduce the possibility of infection and the patient was lying on the operating-table. Alex saw the anesthetist begin giving intra-tracheal anesthesia. The patient fell asleep. The anesthetist said the surgeon could begin the operation immediately.

The surgeon painted the operative field with iodine, covered the patient with sterile drapes (sheets) leaving bare only the operative field. The surgeon made a midline abdominal incision with a scalpel. Bleeding was stopped with the clamps. On laparotomy² turbid exudate and food mass were found in the abdominal cavity. The stomach being lifted up, the perforated ulcer 0.5 cm in diameter was found on the posterior³ side in the lower portion of the stomach. The resection⁴ of the stomach was performed. Having cleansed the abdominal cavity from exudate and food mass and having introduced into it antibiotics, the surgeon closed the abdominal wound in layers with drainage. A patch was stuck on the wound. 300 ml of blood and 500 ml of glucose were transfused during the operation. The patient survived the operation well.

The patient having been taken on a stretcher cart from the operating-room to his ward, Alex stayed with him. Two hours later the patient recovered his consciousness. His general state was satisfactory.

Thereafter the doctor in charge examined the patient every day. Alex saw that the patient's post-operative course was uneventful. No complications were noted, the wound was healing well.

On the 7th post-operative day Alex took out the stitches himself under the guidance of the doctor in charge. The patient was recovering gradually. The doctor in charge expected him to be discharged from the hospital on the 14th post-operative day.

NOTES

¹ the symptom of Stchetkin–Blumburg	симптом Щеткина–Блумберга (характерен тем, что при надавливании на стенку живота боль резко не проявляется, но при быстром устранении руки обследующего боль очень резко увеличивается)
² on laparotomy	при лапаротомии (<i>вскрытии брюшной полости</i>)
³ posterior anterior	задний передний
⁴ resection	резекция (<i>удаление части органа, например, части желудка и т. д.</i>)

XV. Answer the questions based on the text:

1. What are the main principles used in surgery?
2. What specialists does the operating team consist of?
3. What does the operating room contain?
4. Where was Alex present the other day?
5. In what condition was the patient admitted to the hospital?
6. How did the doctor on duty examine the patient?
7. What was clearly observed on examination and palpation of the abdomen?
8. What did the symptom of Stchetkin–Blumburg confirm?
9. What did the X-ray examination reveal?
10. What was the diagnosis?
11. How did the surgeons get ready for the operation?
12. What had been done to prepare the patient for the operation?
13. What anaesthesia was given to the patient?
14. What was found on laparotomy?
15. How did the surgeon perform the operation?
16. How did the surgeon close the abdominal wound?
17. How did the patient survive the operation?
18. When did the patient recover his consciousness?
19. What was the patient's general state after the operation?
20. What was the patient's post-operative course?
21. When were the stitches taken out?

LANGUAGE DEVELOPMENT

XVI. Find 3 sentences with Complex Object and 3 sentences with the Absolute Participial Construction in the text.

XVII. Find English equivalents for the following word combinations and sentences:

- 1) защитное напряжение мышц;
- 2) симптом Щеткина–Блюмберга был ясно выражен;
- 3) наличие свободного газа в брюшной полости под правым куполом диафрагмы;
- 4) хирург закрыл рану послойно;
- 5) послеоперационное течение было неосложнённым;
- 6) больной перенес операцию хорошо;
- 7) мутный экссудат и пищевые остатки;
- 8) кровотечение было остановлено зажимами;
- 9) хирург обработал операционное поле йодом;
- 10) через два часа больной пришел в себя;
- 11) во время операции было перелито 300 мл крови и 500 мл глюкозы;
- 12) хирург сделал разрез по средней линии живота;
- 13) в передней части желудка;
- 14) общее состояние пациента было удовлетворительным.

XVIII. Fill in the missing words. Choose from the following:

ability, physician, bedside manner, proper, disease, advice, news, kindness, carried out, exact, calm, techniques, skills, follow

In addition to medical knowledge and ... surgeons need social ... in order to be successful with patients. Making an ... diagnosis and determining ... treatment is only part of the job. After that, the ... must explain to the patient the nature of the Next, the physician must give ... and convince the patient to ... it. Sometimes it is necessary for the physician to give a patient very bad ... and this difficult task must be ... with ... and without destroying the patient's ... to face the future.

In short, doctors need “people skills”. The physician who can comfort and ... a sick patient has a good

XIX. Correct the mistakes:

1. Relief of pain depend from the treatment of its case. (3)
2. Damage of the body tissues in a result of injury may be dangerously. (3)
3. When anything is rong about your body you may fill pain. (4)
4. The surgeons get ready to operations in the scrubbed room. (2)
5. The woman has been complaining on a squeezed pain in the substernal area for 3 hours. (2)
6. If the postoperative cause is uneventful the patient will be discharged at the 7th day. (2)

XX. Complete the sentences using Complex Object:

1. We know acute appendicitis ...
2. He believed the post-operative course of the patient ...
3. We saw the operative area ...
4. The surgeon wanted ...
5. Everyone would like ...
6. They thought the incision ...
7. The doctor made the nurses ...

XXI. Translate the following sentences into English using Complex Object:

1. **Я никогда не слышал:** как вы говорите по-английски; как он читает лекции; как этот больной кашляет; чтобы этот больной жаловался.
2. **Видели ли вы когда-нибудь:** как хирург зашивает рану послойно; как анестезиолог дает наркоз? как хирург делает разрез по средней линии живота?
3. **Мы не ожидали:** что он выздоровеет так скоро; что она будет прикована к постели так долго; что боль распространится в за грудинную область.
4. **Я бы хотел:** чтобы врач проверил мне зрение; чтобы Вы рассказали нам об этой операции; чтобы врач выписал меня из больницы как можно скорее; чтобы Вы прошли полное обследование.

XXII. Transform the sentences using the Absolute Participial Construction:

1. As the patient suffered from a severe pain the doctor examined him thoroughly.
2. The surgeon stuck a patch after the abdominal wound had been closed in layers without drainage.
3. After the doctor had performed the operation the patient's condition began to improve.
4. As there was no preserved blood the surgeon used blood substituting solutions.
5. When the nurse had got the operating-table ready the patient was laid down on it.
6. As the patient complained of a severe pain the nurse gave him another injection.

XXIII. Translate into English:

1. Так как врач предположил наличие прободной язвы, было немедленно сделано рентгеноскопическое исследование желудка.
2. Хирург начал пальпировать живот, при этом боль резко усилилась.
3. Так как больной потерял много крови, врачи решили сделать переливание.

4. Так как операционная рана заживала хорошо, лечащий врач решил выписать пациента на 14-й послеоперационный день.
5. После того, как врач закрыл операционную рану послойно и наложил швы, больному перелили 300 мл крови.

XXIV. Fill in the missing parts of the dialogue:

- _____ .
- Two days ago. They brought me here in an ambulance.
- _____ .
- I'm still a bit weak, but I've been allowed to walk.
- _____ .
- Well, if everything goes well they will take out the stitches next Tuesday.
- That's good news. I wish you quick recovery.
- _____ .

XXV. Express your sympathy. Choose from the words and expressions in the columns below:

- How is Henry?
- His health is rather poor. (He hasn't been too well lately.)
- What kind of trouble does he have? (What's wrong with him?)
- He has stomach ulcer.
- I'm awfully sorry to hear that.

Lynn	appendicitis	1. I'm deeply sorry to hear that.
Bob	heart trouble	2. That's a pity/shame. I hope things will come all right.
your father	myocardial infarction	3. I hope you will get on all right.
Tom	kidney trouble	4. Oh, dear. You must be very upset.
George	liver trouble	5. That's awful. I'm ever so sorry.
Jane	cholecystitis	6. Let's hope for the best.

XXVI. Role-play the dialogue between a doctor and a patient using the information below:

Role A: Doctor

A patient comes into your surgery. You need to ask him:

- what his problem is;
- how long he has had the pain;
- when the pain started;
- if the pain bothers him at night;
- where it hurts;
- when the pain gets worse;
- if the pain is sharp or dull;
- if the pain radiates anywhere;

- if he takes any medicine;
- if the medicine relieves the pain;
- if he has lost weight.

Role B: Patient

You have been feeling unwell for about a week. You:

- have pain in the abdomen;
- felt the pain about a week ago;
- suffer from pain at night;
- feel the pain in the right side;
- notice that the pain gets worse after meals;
- think the pain doesn't radiate;
- take some medicines;
- don't think the medicine relieves the pain;
- have lost some weight.

XXVII. Read the text and complete it with the words from the box:

challenges	complication	operative	operating
eliminate	prevent	performed	occur

Asepsis and Antisepsis

Operations are _____ in an operating room using surgical instruments, an _____ table for the patient and other equipment. In spite of a high quality of _____ techniques infections may sometimes _____ . The prevention of such a _____ in surgical practice is one of the major _____ which should be based on the principles of asepsis and antisepsis.

The measures to _____ an infection from entering a wound are called asepsis. Everything which comes into contact with the surgical wound (instruments, dressings, suture material, gloves etc.) must be sterile (free of microorganisms) during all surgical procedures. The surgeon and his assistants must wear sterile gowns, caps, masks and overshoes. The measures to _____ or destroy harmful microbes are called antisepsis.

XXVIII. Answer the questions based on the text “Asepsis and Antisepsis”:

- What is one of the major challenges in surgical practice?
- What principles should surgeons follow to prevent surgical infections?
- What is asepsis?
- What is antisepsis?

MODULE THREE

Topic: First Aid.

Grammar: Perfect Continuous Tenses. Conditional Sentences.

I. Discuss with your friend:

- what knowledge ambulance doctors must have;
- what problems (conditions) ambulance doctors usually deal with.

Share your ideas with the group.

VOCABULARY FOCUS

II. Learn the following words and word-combinations:

abrasion <i>n</i>	ссадина
accident <i>n</i> a street accident	несчастный случай, авария несчастный случай на улице
aid <i>n</i> to give (provide, render) first aid First Aid Station	помощь оказать первую помощь станция скорой помощи
artificial <i>a</i> artificial respiration an artificial respiration apparatus	искусственный искусственное дыхание аппарат для искусственного дыхания
bruise <i>n</i>	синяк, кровоподтек
burn <i>n</i> a severe (bad, slight) burn a first (second, third) degree burn	ожог сильный (большой, незначительный) ожог ожог первой (второй, третьей) степени
burn <i>v</i> to be badly burned the burned surface (part)	обжечь сильно обжечься обожженная поверхность (часть)
contamination <i>n</i> to prevent contamination bacterial contamination	заражение, загрязнение предотвратить заражение бактериальное заражение
delay <i>n</i> without delay	промедление без задержки
elevate <i>v</i> to elevate the injured extremity carefully	поднять (приподнять), поднимать(ся), повышать(ся) осторожно приподнять травмированную конечность

elevated blood pressure, temperature	повышенное кровяное давление, температура
emergency <i>a</i> an emergency case an emergency call emergency operation (measures) emergency surgery	срочный, неотложный, экстренный экстренный (неотложный) случай; больной, нуждающийся в неотложной помощи экстренный вызов (<i>к больному</i>) экстренная операция (<i>меры</i>) неотложная хирургия
excessive <i>a</i> excessive handling excessive heat (cold)	чрезмерный, излишний, избыточный излишнее соприкосновение чрезмерное тепло (холод)
injure <i>v</i> to injure badly (slightly, seriously) to be injured in an accident to injure one's arm (leg, kidneys, liver)	ранить, повредить, ушибить, травмировать повредить (ранить, ушибить) сильно (слегка, серьезно) быть травмированным при аварии повредить руку (ногу, почки, печень)
injury <i>n</i> a bad (serious) injury internal (external) injury	повреждение, травма, ушиб сильное (большое, серьезное) повреждение внутреннее (наружное) повреждение
involve <i>v</i> The paralysis involved both upper extremities.	распространяться, поражать; повлечь за собой Паралич распространился на обе верхние конечности.
knee-joint <i>n</i>	коленный сустав
moan <i>v</i> to moan with pain He is moaning badly (loudly).	стонать стонать от боли Он сильно (громко) стонет.
nausea <i>n</i> to have (feel, suffer from, complain of) nausea to cause (prevent) nausea	тошнота иметь (чувствовать, страдать от, жаловаться на) тошноту вызвать (предотвратить) тошноту
obstetrics <i>n</i>	акушерство
splint <i>n</i> to apply a splint to/over smth	шина наложить шину на ...
squeeze <i>v</i> squeezing pain	сжимать(ся), сдавливать сжимающая боль
stretcher-bearer <i>n</i>	санитар-носильщик
syringe <i>n</i>	шприц

tourniquet <i>n</i> to use a tourniquet to apply a tourniquet to smth	жгут использовать жгут наложить жгут на что-либо
transport <i>v</i>	перевозить, доставлять, транспор- тировать
victim <i>n</i> a victim of/in an accident	пострадавший пострадавший в аварии

III. Practise the pronunciation and translate the word combinations into Russian:

- 1) **emergency** [ɪ'mə:dʒənsɪ], emergency case, emergency measures, emergency surgery, emergency therapy
- 2) **injure** [ɪndʒə], injured, to injure badly, to injure seriously, to injure slightly, to be injured in an accident
- 3) **abrasion** [ə'breɪʒn], abrasions, a slight abrasion, bad abrasions, to get abrasions while falling down, there are abrasions on the patient's face
- 4) **bruise** [bru:z], bruises, there are many bruises on the patient's body, to get bruises in an accident, bruises disappeared after the treatment
- 5) **tourniquet** ['tuənɪkeɪ], to apply a tourniquet, an ambulance doctor applied a tourniquet to the arm, a tourniquet is used to arrest bleeding
- 6) **nausea** ['nɔ:sjə] to feel nausea, to complain of nausea, to take some medicine for nausea
- 7) **excessive** [ɪk'sesɪv], excessive heat, excessive cold, excessive fluid, excessive weight
- 8) **squeeze** [skwi:z], to suffer from a squeezing pain, to complain of a squeezing pain, a squeezing pain subsided
- 9) **nitroglycerin** ['naitro(u)glɪsə'ri:n], to take nitroglycerin, pain is relieved by nitroglycerin, pain didn't subside after nitroglycerin

IV. Remember the following prepositional phrases:

- 1) to make a call **to** some place;
- 2) all day **round**;
- 3) necessary **for** doing smth;
- 4) an important thing **for** smb;
- 5) **on** the spot;
- 6) to be run **over** by a car;
- 7) to apply a tourniquet **to** smth;
- 8) to apply a splint **to/over** smth;
- 9) **without** any delay;
- 10) to be **in** shock;
- 11) to arrive **in/at**.

V. Complete the following charts:

Noun	Adjective
	important
	toxic
artery	
	careful
accident	
	different
urgency	
	excessive

Noun	Verb
	prepare
transfusion	
	know
application	
	contaminate
	recover
handling	
	involve

VI. Use the words on the right to form a suitable word that fits the gap in the same line:

1. A very common emergency is a _____ bone.
2. Burns are classified as first, second or third degree depending on their _____ .
3. _____ injuries to the skin include cuts, abrasions and bruises.
4. Because speed is important in an emergency, it is _____ to have the emergency _____ readily available.
5. Serious burns require immediate (prompt) medical attention and possibly _____ to _____ severe pain.
6. The findings of the laboratory analyses are necessary for the _____ of the diagnosis.
7. The patient's condition was good and the _____ progressed successfully.

break
severe

accident

help, equip

hospital, relief
confirm

recover

VII. Match the words in A with the explanations in B:

- | | |
|---|--|
| <p>A.</p> <ul style="list-style-type: none"> a. ambulance b. emergency c. stretcher d. victim e. plaster f. syringe g. accident h. pincers | <p>B.</p> <ol style="list-style-type: none"> 1. This is someone injured in an accident. 2. This is put around broken limbs to immobilize them. 3. This is used to put drugs into the body. 4. This is a car used for transporting the sick. 5. This is a condition that requires immediate attention. 6. This tool is used for holding tightly and pulling small things. 7. This is used for carrying people who are unable to walk. 8. This is something unpleasant and damaging, that happens unexpectedly. |
|---|--|

VIII. Ask and answer what the following things are used for. Follow the model:

Model: – What's a syringe used for?

– It's used for giving injections.

- a scalpel;
- a stretcher;
- a tourniquet;
- a mouth wash;
- an ambulance car;
- a stethoscope;
- splints;
- bandages.

GRAMMAR PRACTICE

IX. Read the sentences and translate them into Russian defining the tense-forms of the verbs in bold type:

1. How long **has** the patient **been complaining** of the pain in the heart?
2. The signs of heart impairment **had been developing** for a week before the woman was examined by a cardiologist.
3. He went to consult a doctor last Friday. He **hadn't been feeling** well recently.
4. The doctors **have been arresting** profuse arterial bleeding for five minutes but the wound **is still bleeding**.
5. The patient **had been suffering** from a severe stomachache for half an hour before the ambulance arrived.
6. Since when **has** the pain **been radiating** to the left arm and shoulder?

X. Read the story paying attention to the tense-forms of the verbs and answer the questions:

Work Problems

City hospital staff has been having a lot of problems recently.

For several weeks people have been making urgent calls to the hospital, some of the nurses haven't been doing their work and the doctors haven't been receiving the necessary medicines.

In addition, they haven't been getting the necessary information since last week because the radio sets in ambulances haven't been working, and they haven't been sleeping at night because the patients have been moaning all the time.

The doctors are furious. They have been calling their administrator every day and complaining about their problems. He has been promising to help them, but they have been waiting for more than a week, and he still hasn't arranged anything at all.

Questions to answer:

1. What have people been making for several weeks?
2. What's wrong with the medicines?
3. What's wrong with some nurses?
4. Why haven't they been getting the necessary information?
5. Why haven't they been sleeping at night?
6. Who have they been calling every day?
7. What has he been promising?
8. Has he arranged anything yet?

XI. Ask questions to receive the following answers:

- He has been working at the First Aid Station as an ambulance doctor.
- Yes, they have still been giving first aid to the injured people.
- They have been bringing badly burned patients for 2 hours.
- He has been working as a thromboembolic team doctor since 1998.
- Neither the pain had been increasing nor shock had been developing since the doctor gave morphine injection.

XII. Open the brackets using the proper tense-forms:

Victor is an experienced ambulance doctor. He always (to do) his best to give the patient proper aid on the spot. Today he (to be) on duty since morning. He already (to bring) to the hospital a man run over by a car. Now he (to examine) a patient who (to suffer) from a severe, squeezing pain in the substernal area since last night. Victor will call up a thromboembolic team. When the thromboembolic team (to arrive) the (to take) the electrocardiogram, (to make) blood analyses and the prothrombin time (to determine).

XIII. Read and translate the sentences in the Subjunctive Mood:

1. If the First Aid Station weren't on duty all day round many people wouldn't receive medical help in emergency cases.
2. If I could apply splints I would have helped the doctor on duty yesterday.
3. There would have been contamination if the doctor hadn't covered the injury with a sterile gauze dressing.
4. If you hadn't given those injections yesterday the pain would get worse today.
5. If the ambulances weren't radio equipped the hospital doctors wouldn't have time to prepare everything necessary to render emergency.
6. If the doctor hadn't been careful in handling the burned surface the patient would have lost his consciousness.

XIV. Open the brackets using the verbs in the proper tense forms:

1. If we (not to make) a call to the First Aid Station yesterday, my aunt (to die) as she had a bad heart attack.
2. If I (to be) you I (to arrest) the bleeding with a tourniquet.
3. If the pain (not to radiate) to the substernal area, the diagnosis of angina pectoris (to exclude).
4. If the ambulance car (not to arrive) in time in case of a street accident yesterday the victim (to die).
5. What (to apply) you if a patient (to have) a fracture of his leg?
6. The shock (not to develop) if the pain (not to be) so severe in the patient we saw yesterday.

XV. Read the text and answer the questions that follow:

The Ambulance Doctor

Medical problems do not always develop gradually. Sometimes there are emergencies. An emergency is a situation that requires immediate attention and care to prevent greater (further) harm to the patient. However, it is not always possible to get professional medical help right away, so it is important for everyone to be familiar with first-aid procedures.

First aid is immediate assistance given to any person with a sudden minor or serious injury or illness until professional help arrives. For minor condition first aid may be enough (for example, in case of minor burns, cuts or insect stings). For serious problems, first aid should be continued until more advanced care becomes available.

The main aims of first aid are to save (preserve) life, prevent the condition from worsening, or to promote recovery. Fortunately, most first-aid procedures are not complicated and can be performed by anyone with minimum training. In all emergency cases an ambulance should be called. In case of an accident or a sudden severe illness calls are made to the First Aid Station which is on duty all day round¹.

The First Aid Station has many ambulances which are equipped with everything necessary for giving first aid and making a diagnosis. The ambulances have artificial respiration apparatuses, different medicines, such as painkillers, hypotensive drugs, tonics and other preparations, dressing material, first aid instruments, such as pincers, scalpels, syringes and others; sets of splints and stretchers. There are special ambulances equipped with everything necessary for reanimation of the organism. All ambulances are radio equipped. This is a very important thing² for the ambulance doctor, because it enables him to send the necessary information to the hospital, so that the hospital could prepare all the necessary instruments for an urgent operation, blood transfusion or anything else beforehand.

The main thing in the work of the ambulance doctor is to make a correct diagnosis quickly. The ambulance doctor must have deep knowledge of emergency surgery, toxicology, emergency therapy, obstetrics and gynaecology, because he must always do his best³ to give the patient proper aid on the spot.

The other day I had a very interesting talk with Alexei Danilov. He graduated from the Medical University two years ago. Since then he has been working as an ambulance doctor at the First Aid Station. Alexei told me about some cases from his practice.

Once he had to give first aid to a man who was run over by a car⁴. When Alexei arrived at the place of the accident he examined the victim. The man was badly injured, he had an open bleeding wound in his leg, his arm was fractured, there were many injuries, abrasions and bruises on his face and forehead. The man lost his consciousness and was moaning all the time.

First of all Alexei tried to arrest profuse arterial bleeding; he elevated the injured extremity carefully and applied a tourniquet above the place of bleeding. Next he put a sterile gauze dressing on the man's face and forehead to prevent contamination. Then Alexei examined the arm and applied a splint to it. The injection of morphine and camphor having been given, the man recovered his consciousness, but he complained of nausea. It was necessary to transport the patient to the nearest hospital without delay, because the patient was in a very poor state. The stretcher-bearers laid the patient down on the stretcher carefully and in 15 minutes the patient was brought to the hospital. If the ambulance doctor hadn't given the patient emergency help, the patient would (could) have died.

The other day Alexei was called to a patient with myocardial infarction. The patient had been suffering from a severe, squeezing pain in the substernal area for two hours. He had had such a pain before, but it had been relieved by nitroglycerin. This time the pain was much more severe⁵ and it didn't subside after nitroglycerin. Besides the pain radiated to the left shoulder and arm. The examination suggested myocardial infarction.

Alexei called up a cardiological team. Before their arrival he had given the patient an injection of a pain killer, after which the pain considerably subsided. If Alexei had not given the patient this injection the pain would have been too severe. The cardiological team having arrived, the electrocardiogram was taken, the blood analysis was made, the prothrombin time was determined⁶. The electrocardiogram and the blood analysis confirmed the diagnosis of myocardial infarction. The patient was transported to the hospital without delay.

First aid is often needed in case of burns. It often depends on their severity. First degree burns show reddening of the skin. Second degree burns damage deeper skin layers, and third degree burns destroy tissue of deeper skin layers. To treat a first and second degree burn we should run cold water over it

for up to 15 minutes or apply a cool compress to the affected area. We should never open blisters and put oil or other greasy substances on the burn. To relieve pain we can use over-the-counter pain relievers. Applying aloe vera gel or cream can also reduce discomfort from minor burns. Then the burn should be covered with a sterile dry dressing. Patients with severe burns should be transported to the hospital without delay.

NOTES

¹ all day round	круглые сутки
² this is a very important thing	это очень важно
	<i>Обратите внимание на перевод слова thing после прилагательного.</i>
<i>The main thing is to make a correct diagnosis.</i>	Главное — это поставить правильный диагноз.
³ he must always do his best	он всегда должен делать все возможное
⁴ to be run over by a car	попасть под машину
⁵ the pain was much more severe	боль была гораздо сильнее; much — перед сравнительной степенью прилагательного означает: гораздо, намного, во много раз. Например: much better — намного лучше; much warmer — гораздо теплее; much more difficult — гораздо труднее.
<i>The situation is much more serious than you think.</i>	Ситуация гораздо серьезнее, чем вы думаете.
⁶ the prothrombin time was determined	было определено тромбиновое время (<i>определение количества протромбина в крови, показателя свертываемости крови</i>)

XVI. Answer the following questions based on the text:

1. What does an emergency situation require?
2. What is the main aim of first aid?
3. Who can provide first aid?
4. What are ambulances equipped with?
5. What is the main responsibility of the ambulance doctor?
6. What knowledge should the ambulance doctor have?
7. Why should he have such comprehensive knowledge?
8. How should the ambulance doctor give first aid to a victim of a car accident?
9. What should the doctor do to arrest profuse arterial bleeding?
10. What do patients with myocardial infarction usually suffer from?

11. What procedures are usually carried out by a cardiological ambulance team?
12. How should we treat a first and second degree burn?
13. What can we apply to reduce discomfort from burns?
14. What should be done in case of severe burns?

LANGUAGE DEVELOPMENT

XVII. In the text spot 2 sentences in Perfect Continuous tense forms and 2 sentences in the Subjunctive Mood.

XVIII. Find English equivalents for the following word combinations and sentences:

- 1) обследование наводило на мысль об инфаркте миокарда;
- 2) тяжелый ожог, поразивший всю голень и коленный сустав;
- 3) при несчастном случае;
- 4) шина была наложена поверх повязки для иммобилизации пораженной конечности;
- 5) излишнее соприкосновение с ожогом усиливает боль и вызывает шок;
- 6) оказалось, что мужчина попал под машину;
- 7) мужчина все время стонал;
- 8) он жаловался на тошноту;
- 9) оказать первую помощь мальчику с сильным ожогом;
- 10) для предупреждения заражения;
- 11) неотложная хирургия;
- 12) он старался как можно меньше касаться обожженной поверхности;
- 13) срочная операция;
- 14) дежурить круглые сутки;
- 15) остановить сильное артериальное кровотечение;
- 16) на теле пациента было много травм, ссадин и кровоподтеков;
- 17) санитары осторожно положили больного на носилки;
- 18) наложить жгут.

XIX. Choose the best alternative to complete the sentence:

1. We are going to _____ you with a different kind of drug which we hope will be more effective.
 a) cure; b) heal; c) treat.
2. His blood pressure was _____ .
 a) measured; b) tested; c) taken.
3. You should take an aspirin or something to help _____ the pain.
 a) calm; b) subside; c) relieve.

4. The surgeon operated _____ his leg yesterday.
a) for; b) on; c) with.
5. What's the _____ with this patient?
a) cause; b) reason; c) matter.
6. You've got a sore throat, you should _____ it with salt water.
a) gurgle; b) giggle; c) gargle.
7. You shouldn't take antibiotics without a doctor's _____ .
a) indication; b) reception; c) prescription.

XX. Fill in the blanks with prepositions where required:

1. There are sterile pincers, syringes, lancets, scalpels, and different sets ... surgical instruments ... the surgical nurse's table.
2. The patient complained ... a severe, squeezing pain ... the substernal area which he had been suffering an hour. Besides the pain radiated ... the left shoulder and arm.
3. The heart muscle is involved ... case ... myocardial infarction.
4. A tourniquet is used ... case ... a profuse arterial bleeding. It is then applied as close ... the wound as possible.
5. If a severe burn involves the whole leg and the knee-joint one should apply a splint ... the dressing ... the immobilization ... the injured extremity.
6. After the ambulance doctor gave first aid ... the victim ... a street accident, the latter was transported ... the hospital ... delay.
7. The stretcher-bearers elevated the wounded man and laid him a stretcher carefully.
8. A nurse must apply a tourniquet ... the patient's arm before giving him an intravenous injection.

XXI. Correct the mistakes:

1. We watched the doctor to elevate the injury extremity carefully. (2)
2. The patient is complaining on a severe pain for half an hour. (2)
3. What is the better treatment of a burn. (2)
4. This time the pain was severer and was not revealed by nitroglycerin. (2)
5. In what causes peoples usually make calls on the First Aid Station? (3)
6. Did you ever give first aid to somebody? (2)
7. When the ambulance arrived to the place of an accident the victim examined by the doctor. (2)

XXII. Use the verbs in brackets in the proper tense form:

1. The ambulance doctor said the victim of the street accident (to be) in a bad state.
2. The doctor saw the victim (to have) a severe injury of the left lower extremity.

3. The surgeon noted there (to be) many bruises and abrasions on the patient's body.
4. My mother said she (to feel) rotten.
5. It turned out this patient (to have) a heart attack 2 years before.
6. The doctor said I (must) take Vitamin D every day.
7. The doctor considered the administered treatment (to prevent) complications.
8. It turned out the girl (to suffer) chicken-pox in her childhood.
9. The X-ray examination proved the fractured bone (to set) properly.
10. The surgeon was sure this operation (to prevent) the rupture of the appendix.
11. It is well known that a tourniquet (to apply) in case of profuse bleeding.

XXIII. Complete the sentences:

1. The blood transfusion would be necessary if ...
2. If that patient hadn't been moaning, we ...
3. If the bruises, abrasions and injuries weren't covered with a sterile dressing, there ...
4. The patient would have lost much blood if the ambulance doctor ...
5. The patient would have died if ...
6. Were I you, I ...
7. If I were Minister of Health, I ...

XXIV. Translate into English using the Subjunctive Mood:

1. Если бы машины скорой помощи не были радиофицированы, врачи не могли бы передавать в больницу необходимую информацию.
2. Если бы тогда ты не оказал первую помощь на месте, пациент сейчас все еще находился бы в больнице.
3. Если бы машина скорой помощи не приехала на место происшествия вовремя, пострадавший бы умер.
4. Если бы у больного не было обильного артериального кровотечения, то врачи не наложили бы жгут.
5. Если бы он принял тогда нитроглицерин, сжимающая боль в загрудинной области не усиливалась бы.
6. Будь я на его месте, я бы обработал раны и ссадины йодом.

XXV. Translate the following sentences into English using the active vocabulary of this lesson:

1. Пострадавшему была оказана первая помощь на месте происшествия. Врач скорой помощи наложил жгут на поврежденную ногу и перевязал ее.

2. Пострадавший получил такие тяжелые травмы, что он находился в шоке.
3. Все больные с тяжелыми ожогами должны направляться в больницу немедленно.
4. Чтобы предупредить заражение, нужно тщательно обработать рану и наложить стерильную повязку.
5. Больной жаловался на тошноту после еды.
6. Что с вами? Почему вы стонете? — Я чувствую ужасную боль в коленном суставе.
7. Что-то не в порядке у меня с желудком. Время от времени я чувствую сжимающую боль в правой верхней части.

XXVI. Make up direct questions:

Ask your friend:

- what the surgical nurse has to prepare for an operation;
- when he made a call to the First Aid Station;
- when the students of his group will study Emergency Surgery;
- if he has ever injured his leg; how he injured it;
- what medicine can relieve a squeezing pain in the substernal area;
- if they were taught to apply a tourniquet;
- if he has ever given first aid to anybody.

XXVII. Complete the gaps in the conversation between Mrs Allen and the ambulance doctor:

- Now what seems to be the problem?
- I feel a terrible _____ .
- Let me see. I'm afraid you have injured your knee-joint.
- I hope it's not a fracture.
- Anyway, we must apply a _____ to your knee for _____ .
- O.K. It _____ me terribly to move my leg.
- Oh, you've also got an _____ . Let me paint it with _____ .
- Now we are going to take you straight to hospital.

XXVIII. Supply the doctor's questions in the dialogue:

- _____
- The heart has been troubling me for three or four months.
- _____
- It usually occurs on exertion.
- _____
- Yes, it disappears at rest.
- _____

- Oh, yes. I feel it radiate over the whole chest.
- _____
- I didn't think it was serious. I thought it would subside by itself.
- _____

XXIX. Put the sentences in the right order to make up a conversation between Mrs. Barlow and the doctor:

- About a week ago.
- Well, I've got a constant backache and my shoulder hurts as well.
- I see.
- All right.
- It's very important to keep warm as well. The cold will make your shoulder worse.
- All right, thank you.
- When did this start?
- I think you should use some ointment on your back and shoulders. Rub it in twice a day. If it still hurts a lot, take a couple of aspirins.
- What seems to be the matter, Mrs. Barlow?
- I see. I think you should lie flat for at least 24 hours, just to rest your back.

XXX. Role-play the conversation between Mrs. Barlow and her employer when she telephones him to say that she cannot come to work.

РЕПОЗИТОР

MODULE FOUR

Topic: Infections.

Grammar: Complex Subject.

I. Discuss with your friend:

- how common are infectious diseases;
- what symptoms are associated with them.

Share your ideas with the group.

VOCABULARY FOCUS

II. Learn the following words and word-combinations:

<p>associate <i>v</i> to be associated with smth</p> <p>The rash is associated with itching.</p>	<p>ассоциировать, связывать быть связанным с чем-либо, ассоциироваться с чем-либо Сыпь сопровождается зудом.</p>
<p>bacillus {<i>pi. bacilli</i>} <i>n</i> typhoid bacilli to reveal (find, recover) bacilli</p>	<p>бацилла тифозные бациллы обнаружить (найти, выделить) бациллы</p>
<p>bacteriological <i>a</i> bacteriological test (experiment)</p>	<p>бактериологический бактериологический тест (опыт)</p>
<p>cholera <i>n</i></p>	<p>холера</p>
<p>convalescence <i>n</i> convalescence may be slow (rapid, uneventful)</p> <p>to make (have) convalescence to make a good convalescence Don't let your patients be upset. It's bad for their convalescence.</p>	<p>выздоровление, выздоравливание выздоровление может быть медленное (быстрое, гладкое, без осложнений) выздоровливать быстро выздоравливать Не разрешайте больным волноваться. Это плохо отражается на их выздоровлении.</p>
<p>diphtheria <i>n</i></p>	<p>дифтерия</p>
<p>distribution <i>n</i> the distribution of a disease (rash, contamination, infection)</p>	<p>распределение, распространение, расположение распространение болезни (сыпи, заражения, инфекции)</p>
<p>enteric fever <i>n</i></p>	<p>брюшной тиф</p>

eruption <i>n</i> the character (appearance, spread, nature, duration) of the eruption the eruption is extensive	высыпание характер (появление, распространение, природа, продолжительность) высыпания высыпание обильное (обширное)
fluid <i>n</i> cerebrospinal fluid clear (purulent, turbid) fluid	жидкость спинномозговая жидкость чистая (гнойная, мутная) жидкость
immunity <i>n</i> artificial (natural) immunity long (persistent) immunity	иммунитет, невосприимчивость (к болезням) искусственный (естественный) иммунитет длительный (постоянный, стойкий) иммунитет
infectious <i>a</i> an infectious disease	заразный, инфекционный инфекционное заболевание
itch <i>v</i>	чесаться, зудеть
itching <i>n</i> itching appears (disappears, spreads, disturbs, troubles) to relieve itching	зуд зуд появляется (исчезает, распространяется, беспокоит) облегчить (снять) зуд
malaise <i>n</i> constant (general, slight, bad) malaise	недомогание постоянное (общее, легкое, сильное) недомогание
malaria <i>n</i>	малярия
manifestation <i>n</i> the clinical manifestation of some disease major (minor) manifestations	проявление клиническое проявление болезни основные, главные (второстепенные, неосновные) проявления
meningitis <i>n</i> cerebrospinal meningitis	менингит, воспаление мягкой мозговой оболочки цереброспинальный менингит
meningococci <i>n</i> to find (recover, reveal) meningococci	менингококки найти (выделить, обнаружить) менингококки
occur <i>v</i> local symptoms (complications, contamination, some features) occur loss of consciousness occurs	встречаться, случаться встречаются местные симптомы (осложнения, заражение, некоторые особенности) наступает потеря сознания

plague <i>n</i> an outbreak of the plague	чума вспышка чумы
prodromal <i>a</i> prodromal period (symptoms, signs) prodromal symptoms are present (absent, appear, disappear)	продромальный, предшествующий болезни продромальный период (симптомы, признаки) продромальные симптомы имеются (отсутствуют, появляются, исчезают)
rash <i>n</i> a rash comes out (appears, disappears, spreads) the type (colour, distribution) of the rash The rash has faded from the skin.	сыпь сыпь выступает (появляется, исчезает, распространяется) тип, вид (цвет, распространение) сыпи Сыпь исчезла с кожи.
regain <i>v</i> to regain one's health (weight) to regain full strength to regain one's consciousness	восстановить восстановить здоровье (вес) полностью восстановить силы прийти в себя, очнуться
running nose <i>n</i> to have a running nose	насморк, обильное выделение из носа иметь насморк
stamp out <i>v</i>	искоренить, ликвидировать
tongue <i>n</i> the tongue is coated	язык язык обложен, покрыт налётом
vaccination <i>n</i> prophylactic vaccination to carry out vaccination	вакцинация профилактическая вакцинация проводить вакцинацию
whooping-cough <i>n</i>	коклюш

III. Practise the pronunciation and translate the word-combinations into Russian:

- 1) **characteristic** [ˌkærɪktəˈrɪstɪk], characteristic symptoms, to be characteristic of smb/ smth, a sore throat is characteristic of many diseases
- 2) **occur** [əˈkɜː], cough occurs, characteristic local symptoms may occur, when did it occur? this disease occurs seldom; in case of angina pectoris a sudden chest pain occurs at night
- 3) **particular** [pəˈtɪkjʊlə], particularly [pəˈtɪkjʊləli], this case is of particular interest to us; these symptoms were particularly marked
- 4) **diphtheria** [dɪfˈθɪəriə], to be ill with diphtheria, to fall ill with diphtheria, to treat for diphtheria

- 5) **whooping-cough** ['hu:pɪŋ kɔ:f], in case of whooping-cough, specific cough develops in case of whooping-cough, to cure of whooping-cough
- 6) **rash** [ræʃ], rash appears, rash disappears, rash is a clinical feature of many infectious diseases, distribution of rash
- 7) **associate** [ə'souʃieɪt], to be associated, it is associated with high temperature
- 8) **microorganism** ['maɪkrou'ɔ:gənɪzəm], to be caused by specific microorganisms, to reveal a specific microorganism
- 9) **bacteriological** [bæk,tɪərɪə'lɒdʒɪkəl], to be revealed by bacteriological tests, to carry out important bacteriological tests
- 10) **bacilli** [bə'sɪləɪ], typhoid bacilli, to find (reveal) bacilli, bacilli may be present, this disease is caused by bacilli
- 11) **meningococci** [me'nɪŋ(o)'kɔksaɪ], meningococci are found in the blood, meningococci may invade the blood stream
- 12) **cerebrospinal** [ˌserɪbrə'spaɪnəl], cerebrospinal fluid, meningococci are found in the cerebrospinal fluid
- 13) **meningitis** [ˌmenɪn'dʒaɪtɪs], cerebrospinal meningitis, to treat a patient for meningitis
- 14) **plague** [pleɪɡ], the plague begins with chills and fever, an outbreak of the plague, the plague has been stamped out in our country
- 15) **cholera** [kɔlərə], to make the diagnosis of cholera, to treat for cholera, cholera is an infectious disease
- 16) **malaria** [mə'leəriə], to diagnose malaria, malaria is mainly found in tropical countries, malaria occurs in summer and autumn
- 17) **malaise** ['mæ'leɪz], general malaise, to complain of malaise, to experience malaise, to suffer from malaise

IV. Remember the following prepositional phrases:

- 1) to stamp **out**;
- 2) to be characteristic **of** smb/smth;
- 3) to be associated **with** smth;
- 4) thanks **to** smth;
- 5) immunity **to** smth;
- 6) to result **from/in**.

V. Match the words and phrases in A with their Russian equivalents in B:

A. 1) rash

2) the tongue is coated

3) to be associated with

4) to reveal bacilli

5) whooping-cough

6) to itch

B. 1) менингит

2) обнаружить бактерии

3) ликвидировать

4) чесаться; зудеть

5) характерные симптомы

6) сыпь

- | | |
|---------------------------------|--------------------------------|
| 7) to be ill with enteric fever | 7) БЫТЬ СВЯЗАННЫМ С |
| 8) characteristic symptoms | 8) вернуть себе, восстановить |
| 9) meningitis | 9) язык покрыт налётом |
| 10) cerebrospinal fluid | 10) коклюш |
| 11) to stamp out | 11) БЫТЬ БОЛЬНЫМ брюшным тифом |
| 12) to regain | 12) цереброспинальная жидкость |

VI. Match the words below with their correct definitions:

inflammation	is a serious disease of lungs which makes breathing difficult
malaise	a feeling of physical or mental discomfort
pneumonia	a disease caused by the bite of a certain type of mosquito, in hot countries
rash	is a condition associated with many illnesses where you develop a high temperature
convalescence	a serious infectious disease of the throat which makes breathing difficult
malaria	a set of red spots on the face and/or body, caused by illness
diphtheria	getting well after an illness

VII. Fill in the following charts:

Noun	Adjective
immunity	
	scientific
infection	
character	
	attentive
	strong
vision	
	able
harm	

Noun	Verb
	achieve
manifestation	
distribution	
	associate
	appear
	improve
invasion	
	resist
defence	

VIII. Use a word on the right to form a suitable word that fits the gap in the same line:

- | | |
|---|---------------------------|
| 1. In the course of their _____ in the body many _____ microorganisms produce virulent poisons or toxins. | grow, pathogen |
| 2. _____ in infectious diseases use blood _____ for the treatment of dysentery, brucellosis and other diseases. | special, transfuse |
| 3. The infectionist is sure the _____ of rash will help him to make a proper diagnosis. | distribute |

4. The _____ to resist microorganisms may be _____ and artificial.
5. The clinical _____ of enteric fever must be clear soon.
6. Prophylactic _____ is carried out against a number of infectious diseases.
7. Every infectious disease has a specific way of _____ the human body.

able, nature

manifest

vaccine

invade

GRAMMAR PRACTICE

IX. Read the sentences and translate them into Russian defining the grammar structures:

1. The analysis of cerebrospinal fluid having revealed no presence of meningococci, the diagnosis of meningitis was not confirmed.
2. The therapist believed the patient's high temperature to be associated with a very severe inflammation of the throat.
3. I have had a running nose since Monday but since no elevated temperature has been observed I am out in the open air.
4. Three days after the onset of the disease the doctor noted eruption to appear on the patient's chest.
5. On being operated on for some heart defects patients are usually applied an artificial blood circulation apparatus.
6. The manifestation of enteric fever may occur on the eighth or the ninth day, characteristic eruption appearing on the abdomen.
7. The woman had been suffering from acute itching for a week before she was prescribed a healing ointment.

X. Find Complex Subject and translate the sentences:

1. The biochemical blood analysis is known to reveal some changes in our body.
2. We watched the nurse give the patient intramuscular injection.
3. Irregular diet and emotional overstrain have been found to contribute to the development of gastric and duodenal ulcers.
4. Human organism is known to have a specific capacity of resistance against infection.
5. The doctor observed the patient's condition have been gradually improving since the administration of this proper preparation.
6. The boy was known to have had heart problems since he was 4 years of age.
7. The patient was known to have had hypertension for fifteen years.
8. The wound was found to be healing nicely.

XI. Make up sentences with Complex Subject using the following table:

The consultations	seem		
The recommendations	are likely	to be	
The injections	are sure		useful
The new methods	turned out	to have been	effective
These procedures	proved		
These measures	don't seem		

XII. Change the following complex sentences into simple ones using Complex Subject:

Model: It is said that the rash is often associated with itching.

The rash is said to be often associated with itching.

1. It seems that the patient feels better after these procedures.
2. It is likely that dull heart sounds will not be heard.
3. It is expected that the patient's family history will supply all the data regarding his health.
4. It was reported that the onset of the last attack of substernal pain had been associated with vomiting.
5. It was known that the patient had not been operated on before.
6. It was considered that the urinalysis confirmed a serious kidney trouble.
7. It is certain that the doctor examines the inner organs carefully to be sure of his diagnosis.
8. It is likely that the patient will calm down after the injection of a sedative.

XIII. Use a subordinate clause instead of Complex Subject:

1. The patient was known to have been operated on for appendicitis a year ago.
2. The diseases of this group are reported to spread through the skin and mucosa.
3. The human body is known to possess immunity.
4. These diseases are likely to be eradicated in the near future.
5. Influenza is considered to be an epidemic disease.
6. Epidemics of influenza happen to occur at unpredictable intervals.
7. Immunity to one strain is not likely to protect you from other flu viruses.

XIV. Read the text and answer the questions that follow:

Infections

Infections are known to be caused by the invasion and growth of microorganisms in the human body. Bacteria, viruses and some fungi causing infections are called **pathogens** or, more commonly, germs.

In general, the human body is certain to fight an infection and is able to resist the invading organisms. This ability is called **immunity**, it being natural or artificial (acquired).

Natural immunity is provided by such bodily defense mechanisms as a) the skin and the mucous membranes that line the mouth, nose and bronchi; b) harmless bacteria in the body which interfere with¹ the growth of harmful germs; c) acidic stomach juices containing disease-fighting chemicals and d) specialized white blood cells that live in the tissue, fluids and blood.

Artificial immunity² is known to result from prophylactic vaccination, it being carried out against a number of infectious diseases in our country. Introducing germs into the body artificially in a controlled manner is believed to stimulate the body to produce antibodies that will prevent the growth of the same antigen in the future. Because this acquired immunity often does not last a lifetime, it may be necessary to immunize people periodically.

Some infectious diseases are known to have a sudden (rapid) onset. For example, the incubation period of influenza and rhinovirus may last only 1 day. However, in other infections the onset is gradual and may last several days (COVID-19).

Prodromal symptoms³ appear earlier than the characteristic features, and therefore it may be difficult to make the diagnosis in the initial stages of the disease.

A sore throat, a running nose or nasal congestion, cough, fever and malaise may occur among the most characteristic symptoms⁴ of an acute infection. Many diseases are likely to begin with these symptoms, but a sore throat is particularly characteristic of such diseases as quinsy and diphtheria; specific cough occurs in case of whooping-cough.

Rash is considered to be a clinical feature of such infectious diseases as chickenpox and measles. Special attention should be paid to the type of rash, its colour and distribution and whether it is associated with itching or not.

Chickenpox, or varicella, is one of the common infections in childhood. It is an acute, highly contagious disease caused by varicella zoster virus. It mainly occurs in children under 10 years of age. Chickenpox is characterized by vesicular, itchy rash that appears on the trunk on the 3d-5th day and lasts around 7 days. Rash may be accompanied by fever, headache, cough and malaise. Today a vaccine is available that protects children against this infection. It is a safe and effective way to prevent chickenpox and its possible complications.

All infectious diseases are known to be caused by specific microorganisms which may be revealed by bacteriological tests: for example, typhoid bacilli⁵ are found in the blood, stool and sometimes in the urine in enteric fever; meningococci are found in the blood and cerebrospinal fluid in meningitis.

Thanks to the scientific achievements⁶ of our medicine many infectious diseases have been stamped out in our country (e.g. the plague, smallpox, cholera, malaria, polio and others).

NOTES

<p>¹ to interfere (with) <i>Don't interfere with my work.</i> <i>to interfere with the growth of bacteria.</i></p>	<p>мешать, препятствовать чему-либо Не мешай мне работать. препятствовать росту бактерий.</p>
<p>² artificial immunity <i>Artificial immunity is known to result from prophylactic vaccination.</i></p> <p><i>An inadequate fluid intake resulted in dehydration.</i> <i>Dehydration resulted from an inadequate fluid intake.</i></p>	<p>искусственный иммунитет Известно, что искусственный иммунитет возникает в результате профилактической вакцинации. <i>Обратите внимание на употребление глагола to result с предлогом from — to result from происходит (возникать) в результате и с предлогом in — to result in — приводить к чему-либо, заканчиваться чем-либо.</i> Недостаточное употребление жидкости привело к обезвоживанию. Обезвоживание произошло в результате недостаточного употребления жидкости.</p>
<p>³ prodromal symptoms</p>	<p>продромальные (предшествующие болезни) симптомы</p>
<p>⁴ among the most characteristic local symptoms</p> <p><i>Surgeon Petrov was the most experienced among us.</i></p> <p><i>There is a little difference between prodromal symptoms of scarlet fever and measles.</i></p>	<p>среди наиболее характерных местных симптомов <i>Предлог among среди употребляется в том случае, когда в предложении идет речь более чем о двух предметах или лицах.</i> Хирург Петров был наиболее опытным среди нас. <i>Предлог between между употребляется только в том случае, когда речь идет о двух предметах или лицах.</i> Существует незначительная разница между продромальными симптомами скарлатины и кори.</p>
<p>⁵ typhoid bacilli <i>bacilli</i></p>	<p>тифозные бациллы <i>мн. ч. от лат. bacillus</i></p>
<p>⁶ thanks to the scientific achievements <i>thanks to, due to</i></p>	<p>благодаря научным достижениям благодаря, вследствие, из-за</p>

<i>Due to his illness he did not work for two weeks.</i>	Обратите внимание на разницу в употреблении этих выражений. Thanks to передает только положительное значение, в то время как due to — как положительное, так и отрицательное. Вследствие (из-за) болезни он не работал две недели.
⁷ infection hospital	инфекционная больница но: infectious disease — инфекционное заболевание
⁸ general malaise	общее недомогание Не путайте следующие слова: malaise недомогание и weakness слабость

XV. Answer the questions based on the text:

1. What may infectious diseases be caused by?
2. What are disease-causing microorganisms called?
3. What is immunity?
4. What kinds of immunity are there?
5. What is natural immunity provided by?
6. What does artificial immunity result from?
7. What onset may some infectious diseases have?
8. Why is it sometimes difficult to make a definite diagnosis in the initial stages of some infectious diseases?
9. What symptom is particularly characteristic of diphtheria?
10. What should special attention be paid to if rash has appeared?
11. What infectious diseases have been stamped out in our country?

LANGUAGE DEVELOPMENT

XVI. In the text spot the sentences with Complex Subject. How many of them are there?

XVII. Fill in the gaps with suitable words:

1. The students have got acquainted with the clinical m... of some infectious diseases.
2. Prodromal s... appear earlier than the characteristic features.
3. Meningococci are found in the blood and cerebrospinal f... in meningitis.
4. A good bedside m... and a hearty a... of the doctor to his patient are an effective remedy.
5. The woman had been suffering from an acute p... for a week before she was prescribed a healing

6. Antibiotics don't work against most v... .
7. Due to great a... of medicine many infectious diseases have been s... .

XVIII. Fill in the blanks with prepositions where required:

1. Thanks ... the doctor's wonderful bedside manner and the thorough care ... the whole medical personnel the patient survived ... a very complex operation. 2. The immunity ... diphtheria results ... the vaccination ... a prophylactic-vaccine. 3. Many infectious diseases have been stamped ... our country thanks ... the great achievements ... medical science and prophylactic measures. 4. ... the beginning ... the fourth day and sometimes later characteristic eruption appears ... the skin ... case ... measles. 5. Profuse abdominal bleeding is often characteristic ... perforated stomach ulcer. 6. ... favourable cases ... measles the period ... convalescence is rather rapid and a patient may feel well after the rash has disappeared. 7. This disease was ... first described ... the nineteenth century. 8. If a doctor determines the presence ... some dull heart sounds he may be sure ... some functional impairments. 9. ... this patient's family history we found out that he had suffered ... malaria while living ... a tropical region. 10. Endocarditis and myocarditis may occur as complications ... meningitis. 11. The use ... antibiotics and sulfonamides is an effective measure ... the treatment ... many infectious diseases.

XIX. Correct the mistakes:

1. The doctor believed the patient's temperature is associated to severe inflammation. (2)
2. Infection result out of direct contact to patients or indirect one. (3)
3. The doctor in charge said he will write out all the data in the patient's case history. (3)
4. Such symptoms of a high fever, a sore throat and rash are characteristic for scarlet fever. (2)
5. The symptoms of an infection results in an injury to body tissues. (2)
6. The organisms that invade in the body and course infections spread by different ways. (3)
7. Epidemics of influenza, or flu, decrease when everyone who have been infectious to a particular type, or strain, of flu virus becomes immune for further attacks. (4)

XX. Following the rules of the sequence of tenses change the sentences below into the past tense:

1. The doctor says there is no rash on the abdomen.
2. The nurse on duty reports there are two new diphtheria patients in Ward 9.
3. I think there will be no itching.

4. The doctor in charge believes there will be no complications after this case of whooping-cough.
5. It is clear that a running nose will occur in any case of a bad cold.
6. The doctor considers that the patient may be discharged in a week.
7. The surgeon believes that this postoperative patient can be allowed to walk.
8. The therapist says he hears dull heart sounds clearly.
9. The surgeon says that her blood analysis has revealed leucocytosis.
10. The nurse on duty reports that the patient has become alert.
11. The doctor says the patient had serious heart impairment a year ago.
12. The doctor supposes that the period of convalescence will not be associated with any complications.

XXI. Give answers to the following questions:

What diagnosis would you make if the patient

- complained of a sudden, severe pain in the right lower part of the abdomen;
- complained of a severe, squeezing chest pain radiating to the left shoulder and arm;
- had pains in the back and extremities, a bad headache and fever;
- had right-sided chest pains, high temperature, cough, moist râles, accelerated respiration and rapid pulse;
- had the inflammation of the gall-bladder;
- had a sore throat, elevated temperature, fine rash on the body and extremities, headache and general malaise.

XXII. Choose the correct form of the Infinitive:

1. The patient was known ... a bad pain, accompanied by nausea a month before his present admission to the hospital.
 - a) to have;
 - b) to have had;
 - c) to be having.
2. Sensitivity to antibiotics was reported ... not only in this girl but in all the other members of the family since their early age.
 - a) to be present;
 - b) to have been present.
3. Skin irritation was revealed ... after each parenteral administration of this preparation.
 - a) to occur;
 - b) to have occurred;
 - c) to be occurring.

4. Cholecystitis is known ... rarely in isolated condition.
 - a) *to be occurred;*
 - b) *to occur;*
 - c) *to have occurred.*
5. Emergency operative treatment is known ... by a course of antibiotic treatment.
 - a) *to be following;*
 - b) *to be followed;*
 - c) *to have been following.*
6. The infectious diseases of man are known ... into two large groups.
 - a) *to have been divided;*
 - b) *to divide;*
 - c) *to be divided.*

XXIII. Translate the following sentences into English using Complex Subject:

1. Говорят, что доктор Иванов, который делает сложные операции на сердце, очень опытный хирург.
2. Известно, что коклюш — это болезнь, при которой ребенок страдает от тяжелых приступов кашля.
3. Сообщают, что в Пакистане зарегистрировано много случаев холеры.
4. Полагают, что его недомогание явилось результатом постоянного нервного перенапряжения.
5. Известно, что вакцинация проводится для профилактики многих инфекционных заболеваний.
6. Считают, что сыпь является одним из характерных клинических проявлений таких инфекционных заболеваний, как скарлатина, корь и другие.

XXIV. Translate the following sentences into English using the active vocabulary of this lesson:

1. Первыми симптомами ветряной оспы являются температура, сопровождающаяся головной болью, и общее недомогание. Через день или два появляется мелкая (fine) сыпь на теле и конечностях.
2. Первыми симптомами кори являются воспаленные глаза и общее недомогание, сухой кашель и насморк. Высыпание начинается на третий день: красная сыпь появляется за ушами, а затем распространяется по всему телу. В это время у ребенка может быть очень высокая температура, и дыхание у него становится учащенным.
3. Наиболее серьезным осложнением после кори является пневмония, которая особенно опасна для жизни детей менее (under) двух лет.
4. При коклюше ребенок страдает тяжелыми приступами кашля, иногда сопровождающегося рвотой.

5. Период инфекционной болезни, во время которого не бывает характерных клинических проявлений, называется периодом инкубации. Первоначальные симптомы появляются во время второй стадии заболевания, которая известна как продромальная стадия. При заболеваниях с кожной сыпью третья стадия называется периодом высыпания.

XXV. Put questions to the following sentences:

1. Natural immunity is provided by our defense mechanisms. (What ...?)
2. Rash is a typical clinical manifestation of measles. (Alternative)
3. The patient complained of general malaise. (What ...?)
4. He injured his leg in a car accident. (How ...?)
5. Special attention should be paid to the type of rash. (What ...?)

XXVI. Complete the story choosing the necessary word:

I had (to go, go) to Infection hospital two years (ago, before) because I had (a, --) stomach-ache. (It, there) was actually (rather, more) serious (so, as) I had to (stand, stay) in hospital (for, since) two weeks. I liked the hospital. (The, --) food was (good, well) (although, despite) we had to get (up, down) at seven (hour, o'clock) (for, to) breakfast, and the (nurses, sisters) were great. (Each, any) bed had a special radio, (that, which) I liked. The beds weren't very (comfortable, convenient) though, and (it, there) was difficult (to sleep, slip). The kids were nice (and, but) I was (homesick, airsick) and I (missed, longed) my family. I was really (excited, exciting) to (see, look) our dog Snowy and our cat Bert when I (got, was getting) home.

XXVII. Supply the missing parts of the dialogue:

Patient: How do you do, doctor.

Doctor: _____

Patient: I don't feel quite myself, doctor.

Doctor: _____

Patient: I am suffering from a bad cough and a sore throat.

Doctor: _____

Patient: Yes. This morning it was 37.4.

Doctor: _____

Patient: Thank you, doctor.

XXVIII. Fill in the gaps and supply each dialogue with an end:

A. – What's your problem?

– I'm running _____ and I feel sick.

– Since when _____ like this?

– It all started _____.

- You seem to have caught _____ .
- What do you think I should do?
- _____ .

B. Doctor: Good morning, Mrs. Palmer. What's the problem?

Patient: Well, I've got a bad _____, doctor.

Doctor: Oh, dear. How long _____ ?

Patient: Oh, about a week. It's getting _____ .

Doctor: _____ .

XXIX. Role-play:

Work in groups of three. Under the doctor's guidance you are examining a patient with chicken-pox. Act out this conversation. Make use of the following word-combinations:

- to notice some rash on the upper chest and back;
- to pay attention to;
- pale pink colour;
- hot and dry skin;
- to examine the throat;
- to be red and swollen;
- laboratory findings;
- to complain of;
- to be running a high temperature;
- to make a diagnosis;
- to agree.

SELF-STUDY MATERIAL

XXX. Read the text about COVID-19 and do the tasks that follow.

Coronavirus infectious disease 2019 (COVID-19) is a contagious disease caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The first case was identified in Wuhan, China, in December 2019. It has since spread worldwide, leading to an ongoing pandemic.

Symptoms of COVID-19 are variable, but often include fever, cough, fatigue, breathing difficulties, and loss of smell and taste. Symptoms begin one to fourteen days after exposure to the virus. Of those people who develop noticeable symptoms, most (81 %) develop mild to moderate symptoms (up to mild pneumonia), while 14 % develop severe symptoms (dyspnea, hypoxia or more than 50 % lung involvement on imaging), and 5 % suffer critical symptoms (respiratory failure, shock, or multiorgan dysfunction). At least a third of the people who are infected with the virus remain asymptomatic and do not develop noticeable symptoms at any point in time, but they can spread the disease.

The virus that causes COVID-19 spreads mainly when an infected person is in close contact with another person. Small droplets and aerosols containing the virus can spread from an infected person's nose and mouth as they breathe, cough, sneeze, sing, or speak. Other people are infected if the virus gets into their mouth, nose or eyes. The virus may also spread via contaminated surfaces, although this is not thought to be the main route of transmission. Infection mainly happens when people are near each other for long enough. People who are infected can transmit the virus to another person two days before they themselves show symptoms, as can people who do not experience symptoms. People remain infectious for up to ten days after symptom onset in moderate cases and up to 20 days in severe cases. The standard diagnosis method is by real-time polymerase chain reaction (PCR) from a nasopharyngeal swab.

Preventive measures include physical or social distancing, quarantine, ventilation of rooms, hand washing and the use of face masks in public places to minimize the risk of transmission. Several vaccines have been developed and various countries have initiated mass vaccination campaigns.

Management mainly involves the treatment of symptoms, supportive care, isolation, and experimental measures.

XXXI. Give English equivalents:

- 1) контагиозное (заразное) заболевание
- 2) устанавливать, выявлять, идентифицировать
- 3) переменчивый, изменчивый, неустойчивый
- 4) воздействие вируса
- 5) заметные симптомы
- 6) тяжёлые симптомы (состояние)
- 7) изображение, визуализация
- 8) респираторная (дыхательная) недостаточность
- 9) повреждение, поражение органов
- 10) распространяться
- 11) через заражённые поверхности
- 12) путь передачи
- 13) различные методы тестирования (контроля)
- 14) мазок из носоглотки
- 15) вакцина, вакцинация
- 16) кампания по вакцинации
- 17) проводится работа по созданию эффективных противовирусных лекарств

XXXII. Answer the questions:

1. What is COVID-19 caused by?
2. Where was the 1st case identified?

3. What are the main symptoms of the disease?
4. When do the symptoms begin?
5. What is the proportion of people who do not develop noticeable symptoms?
6. When can damage to inner organs be observed?
7. How does the virus spread?
8. How long do people remain infectious?
9. What is the standard method to diagnose the disease?
10. What are the main preventive measures?
11. Are vaccination campaigns underway?
12. What does current management involve?

XXXIII. Complete the sentences:

1. Symptoms of COVID-19 include
2. A third of the people who are infected
3. The virus spreads mainly when
4. People remain infectious for
5. The main testing methods to diagnose the disease are
6. Preventive measures include
7. Many countries have initiated

XXXIV. Translate into English:

1. Симптомы появляются от 1 до 14 дней после воздействия вируса.
2. Лёгкие или умеренные симптомы развиваются в 80 % случаев.
3. У некоторых пациентов наблюдаются долговременные последствия болезни.
4. Если инфицированный человек кашляет, чихает или разговаривает, вирус попадает в воздух и может вдыхаться любым человеком, находящимся поблизости.
5. Профилактические меры включают физическое и социальное дистанцирование, карантин, проветривание помещений, мытьё рук, использование масок.

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