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COMPOSING A GYNECOLOGICAL HISTORY

Minsk BSMU 2016

МИНИСТЕРСТВО ЗДРАВООХРАНЕНИЯ РЕСПУБЛИКИ БЕЛАРУСЬ
БЕЛОРУССКИЙ ГОСУДАРСТВЕННЫЙ МЕДИЦИНСКИЙ УНИВЕРСИТЕТ
КАФЕДРА АКУШЕРСТВА И ГИНЕКОЛОГИИ

Т. А. Смирнова, Н. С. Акулич, О. М. Костюшкина

СХЕМА НАПИСАНИЯ ИСТОРИИ БОЛЕЗНИ ГИНЕКОЛОГИЧЕСКОЙ БОЛЬНОЙ

COMPOSING A GYNECOLOGICAL HISTORY

Методические рекомендации

Минск БГМУ 2016

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Model of the title page of a gynecological case history

(The student should fill in all the gaps on this page)

HEALTH MINISTRY OF BELARUS
BELARUSIAN STATE MEDICAL UNIVERSITY
DEPARTMENT OF OBSTETRICS AND GYNAECOLOGY

Head of the Department of Obstetrics and Gynecology
_____
Surname, name, patronymic

_____
(Position, scientific degree)

GYNECOLOGICAL CASE HISTORY # _____

Patient's surname, name, patronymic: _____

Final clinical diagnosis: _____

_____

Student:
_____
(Surname, name, patronymic)

Group _____
Year
_____
Faculty
_____

Teacher:
_____
(Surname, name, patronymic)

_____
(Position, scientific degree)

Minsk 20_____

GENERAL INFORMATION

1. Gynecological patient's full name.
2. Age.
3. Date and time of admission.
4. Home address.
5. Place of work and occupation.
6. Marital status.
7. Diagnosis made at the referring institution.
8. Presenting complaints.

a) **Pain** — this symptom requires a very careful assessment. When questioning a patient the student should get as many details as possible about:

– localization (in the lower abdomen above the pubes, in the external genitalia (the vagina and vulva), in the inguinal, hypogastric, lumbosacral area);

– character (aching, cramping, tensive, pressing, dull, sharp);

– duration;

– time of pain onset;

– severity (severe, moderate, mild);

– if the pain radiates to any area (lumbosacral, hypogastic area; lower limbs, the area of the external genitalia; the rectum, the urinary bladder);

– if the pain is related to other functions (coital activity, urination, defecation; menstrual cycle (occurs during, before or after menstruation or is not related to it);

– change in the patient's general condition during the episodes of pain (weakness, dizziness, fainting, lacking or reduced appetite, headache, fever, chills, nausea, vomiting, frequency and character of vomit).

b) **Leucorrhea (the whites):**

– time of leucorrhea

– source (vestibular, vaginal, cervical, uterine, tubal);

– character (foamy, greenish, creamy, cheesy (caseous), purulent, sanioserous (vestibular, vaginal); mucous, mucopurulent (cervical); sanioserous, bloody, «meat slops»-coloured, mucopurulent, crumb-like, watery (uterine); watery (tubal));

– foul-smelling or not;

– intensity (profuse, moderate, minor).

c) **Hemorrhage (bleeding)**

– source (external genitalia, vagina, cervix, uterine body);

– time of its occurrence;

– duration, the amount of blood loss:

– if the bleeding is associated with the menstrual cycle (menorrhagia (hypermenorrhea) — a profuse bleeding lasting more than 7 days and occurring at regular intervals; polymenorrhea — a uterine bleeding occurring

at regular short intervals (less than 21 days); metrorrhagia — a prolonged uterine bleeding at irregular short intervals; intermenstrual bleeding appear between regular menstrual periods). Particular attention should be paid to juvenile hemorrhage which, as a rule, results in secondary anemia; as well as to the hemorrhages in women at a childbearing age after menstruation delay, in menopause women).

d) **Itching:**
   - intensity;
   - character;
   - time of occurrence.

This symptom may be a sign of both inflammatory process (irritation of the external genitalia with profuse leucorrhea) and other pathology (psychoneurosis, diabetes, skin diseases, vitamin A deficiency, an allergic reaction to medication, etc., age-related changes in older women, etc.).

e) **Dysfunction of the adjacent organs:**
   - the urinary tract (pollakiuria, dysuria, painful urination, complete or incomplete urinary incontinence);
   - bowel (constipation, diarrhea, fecal and flatus incontinence, pain, tenesmus on defecation, bleeding from the rectum).

GENERAL HISTORY

1. Living, social and working conditions.
2. Occupational hazards.
3. Surgical interventions and diseases suffered (including childhood infections, tuberculosis, skin and venereal diseases).
4. Hereditary diseases (mental, endocrine disorders, cancer and others).
5. Bad habits: smoking, alcohol or drug use.
6. Blood transfusions: reasons, complications.
7. Allergic history: intolerance to medicines, food, household chemicals.
8. Hormonal treatment (purpose, duration, effect, complications).

GYNECOLOGICAL HISTORY

1. **Menstrual function:**

– the starting time of the first menstrual period (menarche);

– establishment of the menstrual cycle (at once, for 1 year or longer period of time);

– cycle interval (normally 21–35 days); duration of flow (normally 3–7 days); quantity of menstrual flow (normally 50–150 ml);

– presence of pain syndrome and its relation to the menstruation (before, during or after it);

– changes in menstrual cycle after the beginning of coital activity, childbirth and abortions; gynecological illnesses suffered; associated with the present gynecologic condition. In case of menstrual dysfunction ask about the duration and character of the pathology (amenorrhea, hypomenstrual syndrome, menorrhagia, inter-, pre- and postmenstrual bleeding, dismenorrhea, etc.). If menstruation is absent, it is necessary to clarify when it stopped;

– date of onset of the last normal menstrual period.

2. **Sexual function:**

– the age of the beginning of coital activity;

– casual sexual affairs;

– contact bloody discharge;

– tenderness during coitus; difficulty or impossibility of coitus;

– methods of contraception (if hormonal contraception was used, ask about drugs taken by the patient), its duration and effectiveness, possible complications;

– husband's /sexual partner's health.

3. **Reproductive function:**

– a chronological list of all pregnancies, their course, how they terminated and at what gestational age;

– the period of time from the beginning of sexual activity before the first pregnancy; possible causes of its long absence;

– complications during pregnancy, delivery and the postpartum period; during and after vacuum aspiration or abortion.

4. **Past gynecological illnesses,** methods and outcomes of their treatment. When questioning a patient, it is necessary to remember that gynecological diseases may result from or result in other organs disturbances.

5. **The development of the present disease:**

– time of its onset;

– relation to other factors (childbirth, abortion, menstruation, injury, cooling, stress, extragenital diseases, etc.);

– course of the disease;

– methods of examination used before;

– administered treatment and its outcomes.

OBJECTIVE EXAMINATION

1. **Woman's general condition.** The student should describe:

– the type of constitution (normosthenic, infantile, intersexual, asthenic), body-build (female, male, virile, eunuchoid);

– skeletal structure and its defects, phenotypic features (presence of dysplasia and dysmorphia – micro- and retrognathia, Gothic palate, wide nasal

bridge, short neck, the location of the ears, barrel-chest, hypoplastic nails, plenty of birthmarks and others);

– color of visible mucous membranes and skin, their condition (pigmentation, excessive greasiness, the presence of pregnancy "scarring", acne, folliculitis, scarring after undergoing surgery, etc.);

– proportion and distribution of body fat (on the hips, shoulders, breast, abdomen, thighs, etc.);

– presence of facial or excessive body hair (hypertrichosis, hirsutism, virilism);

– height, body weight and body temperature.

2. Examination of the breasts: development, size and shape, consistency, symmetry, the condition of the skin, areolas and nipples; presence of lumps and tumor-like masses, presence of fluid from the nipples, its color, consistency, character and amount.

3. Examination of the organs and systems:

a) *the condition of the cardiovascular system:* the character of pulse, blood pressure, heart sounds and the borders of the heart;
b) *the condition of the respiratory system:* respiratory rate per minute, auscultation of the lungs;
c) *the condition of the digestive system:* appetite, swallowing (difficult or not), the condition of the oral mucosa and tongue (on the examination of the mouth).

Disorders of bowel function:

– constipation occurs when the uterus bends backwards, neoplasms in the uterus and ovaries, compressing the rectum, inflammatory processes especially localized in the pelvic tissue and peritoneum, as well as in general intoxication;

– diarrhea is observed in the acute phase of the inflammatory diseases, in pelvic peritonitis and parametritis, tuberculosis of the uterine adnexa and pelvic peritoneum, especially if the intestines are involved simultaneously;

– stool and gas incontinence is a symptom of a complete rupture of the perineum and the presence of intestinal-vaginal fistula;

– pain on defecation is usually observed in anal fissures and hemorrhoids or occurs reflexively in case of adnexitis (salpingo-oophoritis);

– tenesmus on defecation can occur in the presence of pus in the Douglas' cul-de-sac (rectouterine pouch), in cancer spreading from the uterine cervix or corpus to the wall of the rectum;

– bleeding from the rectum is characteristic of hemorrhoids, polyps, rectal cancer;

d) *the condition of the urinary system:* the presence of edema, the character of urination, urine color, tapotement sign.

The urinary tract dysfunction:

- frequent urination is observed in the anterior colpoptosis, when the uterus bends backwards, uterine myoma, ovarian tumors pressing on the bladder, in uterine cancer spreading to the bladder, as well as in cystitis, urethritis;
- incontinence (complete or incomplete) is present in the genital prolapse or the bladder prolapse; vesicovaginal, vesicocervical, uretero-vaginal fistula;
- difficulty in urination (urinary retention / ischuria) is observed in complete uterine prolapse or its inversion; it may be due to the bladder dislocation, urethra flexure; it also occurs in pregnant women in case of uterine entrapment in the true pelvis or internal genitalia tumors and is accompanied by frequent vesical urging;
- pain during urination is present when malignant tumors of the uterus or ovary invade the bladder; burning and colic sensation when urinating is observed in urethritis; pain during filling and emptying the bladder is observed in pelvic peritonitis and the spreading of the inflammatory process from the parametrial tissue to the bladder;

e) *the condition of the central nervous system:* consciousness (clear, mental confusion, delirium, coma, loss and recovery of memory); orientation in time and space;

f) *the condition of the endocrine system:* should be assessed taking into account the type of constitution and other special features.

4. Examination of the abdomen:

– examining the abdomen when the patient is standing or lying special attention should be paid to the size, configuration, distension, symmetry, abdominal respiration, changes in the abdomen shape when changing a position;

– on palpating the abdomen the patient should be positioned spine with her knees elevated and flexed to decrease abdominal wall tone. The bladder and bowel should be empty. The student should note the state of the abdominal wall (tone, muscular defense or muscle tension of the abdominal wall, diastasis of the rectus muscles); painful areas, presence of peritoneal symptoms; tumors in the abdominal cavity; infiltrates and possibly their size, shape, borders, consistency, tenderness, mobility, the presence of ballottement symptom;

– on abdominal percussion the borders and contours of individual organs, tumors infiltrates are revealed; the presence of free fluid in the abdominal cavity can be detected;

– auscultation of the abdomen reveals bowel sounds, as well as pregnancy can be differentiated from the internal organs tumors.

SPECIAL GYNECOLOGICAL EXAMINATION

A patient must empty the bladder before the gynecological examination as well as the bowel emptying is advisable.

1. Examination and palpation of the external genitalia, vagina and vaginal opening. The following parameters should be noted:

– the type of body hair (female, male, mixed) and growth (normal, scanty, excessive);

– structure and development of the labia majora and minora, clitoris, meatus, the distance between the base of the clitoris and meatus (normally not more than 2 cm), perineum (high, low);

– color of the mucus (pale, cyanotic, normally pink);

– degree of the urogenital space closing (closed, patulous); colpoptosis (prolapse) degree (independent and on straining);

– pathological processes in the external genitalia and the vulva (tumors, ulcerations, areas of depigmentation, condylomas, fistulas, scars, signs of inflammation, varicose veins);

– state of the hymen or its remains;

– state of the excretory ducts of the large glands of the vaginal vestibule, paraurethral ducts (normally pure; hyperemia, purulent discharge);

– consolidations, tumor-like mass, ulcers and their relation to the adjacent tissues, tenderness, fluctuation, tendency to bleed (to be determined on palpation of the external genitalia);

– varicose nodes, fissures, condylomas, discharge of blood, pus or mucus from the rectum (to be determined on the rectal examination).

2. Examination of the vaginal and cervical mucosa by means of speculum. Describe:

– the folding of the vaginal mucosa (normally evident);

– mucosa color (cyanotic, hyperemic; healthy mucosa is pink);

– presence of ulcers, herpetic eruption, excrescences, scars, ruptures;

– presence and character of the discharge (normally leucorrhea);

– shape of the vaginal part of the cervix (conical, cylindrical, barrel-shaped);

– shape of the external os (oval, slit-like);

– presence of ruptures, ectropion, pseudo erosion, leukoplakia, polyps or other pathological changes;

– character of the discharge from the cervical canal.

3. Vaginal and bimanual (abdominovaginal) examination. Determine:

– condition of the vaginal opening (free or not);

– walls and the fornix (folding, depth, effacement, malformations, scars);

– presence of tumor-like masses (their size, shape, relation to the bladder, rectum, pelvic bones) their consistency or tenderness.

4. Examination of the cervix. Describe:

– location (normally the external uterine os is toward the posterior fornix of the vagina);

– shape, size (length);

– consistency (thick; softened, but thick in the internal os; soft);

– surface (smooth or rough in case of erosion);

– mobility and tenderness on displacement;

– opening of the external os and cervical canal (normally closed);

– cervical lacerations, their depth.

5. Examination of the uterine corpus.

– location of the uterus – the relation to the walls of the pelvis and uterine body to the cervix (normal – anteversio-anteflexio), vertical or horizontal axial displacement;

– size (normal, reduced in case of hypoplasia and atrophy; enlarged due to pregnancy, myoma, hematometra, pyometra, etc.);

– shape (pear-shaped, in health flattened in the anteroposterior direction), spherical in pregnancy or adenomyosis; irregular in the presence of tumors and abnormalities of development, etc.);

– consistency (normal, softened (pregnancy), fluctuating (hemometra, pyometra), heterogeneous (myoma, metritis);

– mobility: normal (moves upward, to the pubis, sacrum, to the left, to the right), limited or doesn't move (tumors, adhesions, infiltrates), excessive (relaxation of ligaments in case of genital prolapse);

– tenderness on palpation and displacement (normally painless).

6. Examination of the adnexal structures (fallopian tubes and ovaries).

– Healthy fallopian tubes are not palpable.

– The ovaries normally are determined on both sides of the uterus closer to the pelvic wall as small elongated painless lumps.

– Note any pathological mass (cystoma, tubo-ovarian mass) in the adnexal structures.

EXAMINATION OF THE CERVIX BY MEANS OF SPECULA. PROCEDURE TECHNIQUE

Spread the labia with the left hand to expose the vagina widely. Insert the posterior spoon-shaped vaginal speculum respectively to the vagina direction. The speculum is placed on the back wall of the vagina slightly pushing the perineum backward. Insert the anterior speculum parallel to the posterior one using flat elevator to raise the anterior wall of the vagina. If it is necessary to increase the access to the cervix, flat plate speculum is inserted into the side fornixes of the vagina.

Besides spoon-shaped Sims speculum and flat elevators, Cusco's bivalve and cylindrical specula are used. A closed speculum is inserted and then slowly opened after reaching the vaginal apex. It enables the doctor to examine the cervix. As the speculum is slowly removed the vaginal walls can be examined.

The labia are spread with the index finger and the thumb of the left hand. Gently insert into the vagina the middle finger of your right hand and slightly pull the perineum backward. Then insert the index finger of your right hand and move both fingers in relation to the axis of the vagina (front upwards – down backwards) as far as it would go. Meanwhile the thumb is directed towards the symphysis, the little and the right fingers are pressed to the palm and the backside of their proximal phalanxes set against the perineum. The pelvic floor, Bartholin glands, urethra are palpated. Evaluate the condition of the vagina and the vaginal part of the cervix.

Proceed with the bimanual examination. Place the left hand over the pubis, move the vaginal fingers into the anterior fornix slightly displacing the cervix backwards. Palpate the uterine corpus with both hands.

Examine the adnexal structures. Move from the uterine angles to the lateral walls of the pelvis: the vaginal fingers are moved to the corresponding posterolateral part of fornix, and the abdominal fingers are moved to the iliac area. The examiner should attempt to bring the abdominal and vaginal fingers quite close together to meet at the sacroiliac joint displacing them anteriorly. Repeat these movements 2–3 times unless the area from the uterine angle to the lateral pelvic wall is examined.

ADDITIONAL METHODS OF EXAMINATION

1. **Rectal examination** is carried out in little girls, adolescents and women in case of atresia, aplasia, stenosis of the vagina. This method allows exploring the posterior surface of the uterus, the tumor and infiltrates in the area of adnexa, retrouterine space, the condition of the sacrouterine ligaments, pararectal tissues. The examination is carried out with the right index finger lubricated with Vaseline. The cervix, sacrouterine ligaments and pelvic tissues can be easily reached and palpated. The rectal examination can be assisted by placing one hand on the lower abdomen to examine the uterine corpus and adnexa.

2. **Recto-vaginal examination** is carried out in case of pathological process in the vaginal wall, the rectum and adjacent tissues. The index finger is inserted into the vagina, the middle in the rectum.

3. **Uterine sounding (hysterometry)** is performed with special metal uterine sound, (hysterometer) made of a flexible metal that allows to change its shape according to the direction of the angle between the cervix uterine corpus and prevents the uterus from the damage (perforation). The sound length is 20–25 cm, the diameter is 1–6 mm. The surface of the sound is marked with a centimetric scale. This method reveals patency, length, shape of the cervical canal and the condition of its walls, pathological inclusions present there; the direction and length of the uterine cavity, the presence fibromatous nodes, uterine

malformations. The sounding is used both for diagnostic purposes and before some surgical interventions.

4. Examination using bullet forceps is an additional aid to the bimanual examination when it is necessary to clarify the relationship of the tumor with the genitalia, the degree of the uterus displacement (complete or incomplete prolapse) or its mobility in retroflexion.

5. Separate therapeutic and diagnostic curettage of the cervical mucosa and the uterine cavity is a common gynecological practice to assess the condition of the endometrium and endocervix. This method is a type of biopsy. It is performed in case of uterine bleeding for early recognizing of malignant tumors of the cervix and uterine corpus, endometrial pathology, retained products of conception and others.

6. Biopsy is in vivo sampling of cells or tissues for their subsequent histological examination. *Target biopsy* performed under visual control using a colposcope or hysteroscope is a method of choice. In gynecological practice an *excisional biopsy* is carried out by the excision of the tissue, preferably with a scalpel. In case of *puncture [needle, punch] biopsy* the sample is obtained by a puncture. Biopsy is performed if malignant processes in the external genitalia, vagina or cervix are suspected.

7. Abdominal puncture through the posterior vaginal fornix *(culdocentesis)* is performed for suspected hemoperitoneum, inflammatory diseases involving accumulation of fluid in the pouch of Douglas (in order to determine the nature of the fluid: blood, serosity, pus).

8. Endoscopic diagnostic methods:

a) *Simple colposcopy* is a medical diagnostic procedure to examine an illuminated, magnified view of the cervix and the tissues of the vagina and vulva using a colposcope. During the procedure the shape, size of the cervix and external os, color and architecture of the mucous membrane, the squamocolumnar junction and transformation zone can be inspected. *Extended colposcopy* is the inspection of the cervix after the application 3% acetic acid which causes a short-term epithelial edema and swelling of spiny epithelial cells layer, contraction of subepithelial vessels and decrease of blood supply; inspection of the cervix after the application of 3% Lugol's solution (Schiller's test): normal cervical mucosa contains glycogen and stains brown, whereas abnormal areas do not take up the stain. *Colpomicroscopy* is the inspection of the cervix stained with 0.1% hematoxylin using a luminescent colpomicroscope.

b) *Hysteroscopy* (with fluid or carbon dioxide) is used to reveal intrauterine pathology.

c) *Laparoscopy* (diagnostic and therapeutic) is the examination of the true pelvis organs and, if necessary, the abdominal cavity using pneumoperitoneum.

d) *Culdoscopy* is the examination of the true pelvis organs by means of an endoscope introduced into the abdominal cavity through the posterior part of vaginal fornix.

e) *Vaginoscopy* is the inspection of vaginal mucosa, the cervix, "pupil" symptom assessment, inspection of the vagina for a suspected foreign body within it. In girls the examination is carried out under anesthesia.

9. Ultrasonography. Two methods are used in current clinical practice: transabdominal (through the anterior abdominal wall) and transvaginal (the probe inserted into the vagina).

10. X-ray methods:

a) *hysterosalpingography or metrosalpingography (HSG)* is used to identify anatomic changes in the uterine cavity, the presence of adhesions in the true pelvis area, to assess the patency of fallopian tubes.

b) *Pneumopelvigraphy, gas pelvigraphy, bicontrast (pneumo)gynecography* is used for differential diagnosis of uterine and anexal tumors, or when it is necessary to diagnose multiple uterine myoma with submucosal nodes location, genitalia malformations, infertility.

c) *Vaginography* is used when genitalia malformations are suggested, especially in childhood and adolescence; or for assessing the condition of an artificial vagina.

d) *Pelvic venography* is carried out to detect uterine and adnexal tumors, to determine the stage of the process, to diagnose tubo-ovarian masses or ectopic pregnancy.

e) *Pelvic lymphography* is performed to clarify the stage of malignancy, to determine the efficacy of the surgery or radiation therapy.

f) *X-ray of the skull and sella turcica* is carried out to assess the condition of the hypothalamic-pituitary axis.

g) *X-ray of the stomach and intestines* is obligatory for women in the presence of ovarian tumors.

h) *Excretory urography*, *barium enema* is performed if indicated.

i) *Computed tomography (CT)* is a method that makes use of computer-processed combinations of many X-ray images taken from different angles to produce cross-sectional (tomographic) images of specific areas of a scanned object, allowing the user to see inside the object without cutting. Radiographic images are taken around a single axis of rotation. For each organ and tissue an absorption coefficient in normal and pathological conditions is established. It is measured in Hounsfield units (H). CT scanning enables the doctors to obtain sagittal, frontal and any other cross-sectional virtual "slice" of an examined organ; the obtained images do not overlap each other. CT imaging gives a complete 3D-view of the scanned organ or pathological focus. Radiation exposure is lower than in other X-ray procedures. In gynecological practice, besides the *internal genitalia CT*, the *CT of sella turcica, kidneys and adrenal glands* is used as an additional diagnostic method.

11. Radioisotopic examination of the endometrium is a method based on the phosphorus isotope (^{32}P) property to accumulate in actively dividing cells, tumor tissues, especially malignant ones in an amount greater than in the intact tissues of the same organ. The method gives a clear view of the proliferation

degree of endometrial cellular elements at the site of the pathological process if it is of focal character. The method can be used for screening or monitoring in women receiving hormone replacement therapy for hyperplastic processes.

12. Functional diagnostics tests (methods to determine the hormonal function of the ovaries):

a) *cytological study of the vaginal discharge:* a smear sample for colpocytology is collected from the anterior-lateral part of fornix. It enables de doctor to determine estrogen concentration in the female organism. There are 4 degrees of estrogen concentration: sharp, moderate, slight insufficiency, sufficient concentration.

b) *Karyopyknosis count* is the ratio of surface cells with bright pyknotic nucleus to the total number of surface cells which are formed by the action of estrogen. The karyopyknosis count is carried out in the 1st phase, ovulation period, and the 2nd phase of the cycle. The karyopyknotic count is 20 – 40% in the 1st phase and 60 – 80% in the ovulation period. In the 2nd phase karyopyknosis count is reduced: 20 – 30%.

c) *«Pupil» symptom.* In the normal menstrual cycle external os the cervix begins to dilate from the 5th day due to the accumulation of vitreous transparent mucus, acquiring the form of a pupil; the maximum amount of mucus is observed in ovulation, then its amount decreases and the uterine os is gradually closed.

d) *«Fern» symptom (the symptom of cervical mucus crystallization)* is most evident during ovulation.

e) *Measurement of cervical mucus tension*. Mucus sample is collected from the cervical canal with forceps, their branches are opened and the length of the mucus thread is measured. The maximum strain (10-12 cm) is observed at the ovulation time.

f) *Measurement of basal (rectal) temperature*. According to the measurements a curve of basal body temperature is drawn. To establish the curve character the measurement should be carried out for 3 months.

13. Laboratory tests:

a) *Clinical laboratory tests* (complete blood count and urinalysis, blood chemistry study, Wassermann reaction (WR), HIV, coagulogram, blood sugar levels, acid-base balance) are performed by indications.

b) *Bacteriological examination* is carried out to determine the degree of purity of the vaginal contents (the 1st and 2nd degree is normal, the 3rd and 4th ones indicate the presence of inflammation in the vagina); *bacterioscopic tests* are used to identify the disease causative agent, characteristics of its properties, sensitivity to antibiotics.

c) *Cytological tests* are performed for early diagnosis of pathological changes in the epithelium. Samples to be tested are:

- ecto- and endocervical smears;
- a smear taken from the affected area of the mucosa;
- aspirate from the uterine cavity;

– encysted masses punctate;
– ascitic fluid.

d) *Determining hormones level in the blood* (luteinizing hormone (LH, also known as lutropin and sometimes lutrophin), follicle-stimulating hormone (FSH), prolactin, estrogens, progesterone, testosterone, cortisol, insulin and others) *and in urine* (pregnandiol, 17-ketosteroids).

e) *Functional tests* are performed to clarify the functional condition of various parts of the reproductive system and to determine spare capacities of the hypothalamus, pituitary gland, adrenals, ovaries, endometrium. The tests are carried out tests with gestagens; with estrogens and gestagens; with dexamethasone; with clomiphene; with luliberin; with gonadotropins.

14. Medical and genetic testing: determining sex X- and Y-chromatin, karyotype, dermatoglyphics study. Indications for medical and genetic testing are different forms of the absent or delayed sex development, anomalies of reproductive organs development, primary amenorrhea, recurrent miscarriage, infertility, etc.

DIFFERENTIAL DIAGNOSIS

1. Damaged ectopic pregnancy:
– threatening abortion in intrauterine pregnancy;
– incomplete abortion;
– ovarian apoplexy;
– adnexitis (salpingo-oophoritis);
– torsion of the ovarian tumor pedicle;
– acute appendicitis;
– acute intestinal obstruction;
– nephrolithiasis.

2. Incipient spontaneous abortion:
– damaged ectopic pregnancy;
– cervical pregnancy;
– hydatidiform mole;
– submucous uterine myoma;
– adenomyosis;
– endometrial polyps;
– dysfunctional uterine bleeding.

3. Incomplete abortion:
– damaged ectopic pregnancy;
– cervical pregnancy;
– hydatidiform mole;
– choriocarcinoma;
– incipient submucous uterine myoma;

– dysfunctional uterine bleeding;
– endometritis.

4. Acute adnexitis (salpingo-oophoritis):

– ectopic pregnancy;
– endometriosis of the uterine adnexa;
– torsion of the ovarian cyst pedicle;
– dysfunctional uterine bleeding;
– acute appendicitis;
– acute intestinal obstruction;
– necrosis of a fibromatous node.

5. Acute endometritis:

– incomplete abortion;
– incipient submucous uterine myoma;
– necrosis of a fibromatous node;
– uterine adenomyosis;
– uterine cancer;
– acute appendicitis;
– inflammatory bowel diseases.

6. Uterine myoma:

– uterine pregnancy;
– ovarian cystoma;
– adenomyosis;
– hydatidiform mole;
– choriocarcinoma;
– endometrial polyps;
– uterine cancer.

7. Ovarian cystoma:

– ovarian cancer (primary or metastatic);
– subserous uterine myoma;
– progressing ectopic pregnancy;
– endometriosis of the uterine adnexa;
– periappendiceal [appendix] mass;
– nephroptosis (falling of kidney).

8. Cervical polyp:

– erosive ectropion;
– incipient submucous uterine myoma;
– endometrial polyp;
– cervical cancer.

9. Endometrial polyp:

– incipient submucous uterine myoma;
– adenomyosis;

– cancer of the endometrium;
– endometrial hyperplasia.

10. Bartholin's cyst:

– acute bartholinitis:
– lipoma of the labia;
– Gartner's duct cyst;
– cancer of vulva.

11. Dysfunctional uterine bleeding:

– uterine cancer;
– incipient abortion;
– damaged ectopic pregnancy;
– adenomyosis;
– endometrial polyp;
– uterine myoma;
– inflammation of the uterine adnexa.

12. Cervical cancer:

– cervical erosion;
– erosive ectropion;
– endocervicitis;
– cervical polyp;
– cervical endometriosis;
– cervical myoma;
– cervical pregnancy.

13. Cancer of the uterine body:

– endometrial polyp;
– adenomyosis;
– uterine myoma;
– uterine pregnancy;
– metroendometritis.

14. Ovarian cancer:

– ovarian cystoma;
– ovarian fibroma;
– endometriosis of the uterine adnexa;
– subserous uterine myoma;
– ectopic pregnancy;
– periappendiceal [appendix] mass;
– intestinal tumor.

PROVISIONAL DIAGNOSIS AND ITS SUBSTANTIATION

The substantiation of the diagnosis is carried out considering the history, clinical and laboratory studies.

Example: Taking into account the history - ... (particularly for the diagnosis), objective and special gynecological examinations data - ..., laboratory and diagnostic tests - …, differential diagnosis performed, the provisional diagnosis is _____.

TREATMENT

The student should state and substantiate the methods of treatment of the disease, the use of the medicines prescribed indicating the purpose of their administration, the dose to be taken, the multiplicity and route of administration, the duration of the course.

When performing surgical procedures (fractional diagnostic curettage, culdocentesis, hysteroscopy, hystero-resectoscopy, laparoscopic or laparotomic intervention, etc.), explain their necessity (indications, conditions, method of anesthesia). Next, describe the operation indicating the time of its performing.

OBSERVATION DIARIES

Observation diaries are written daily.

The patient's complaints and general state should be described here.

The observation diaries must include:

– blood pressure, pulse, respiratory rate, body temperature, state of the tongue;

– data on abdominal palpation;

– condition of postoperative wounds (on the anterior abdominal wall, in the perineum); the day on which the stitches were removed; how the wound has healed (primary, secondary intention).

– presence of abnormal discharge from the genital tract, their intensity (heavy, moderate, poor) and character (bloody, serous-bloody, pus, etc.);

– function of the bladder and bowel.

Each diary should be signed by the supervising teacher.

FINAL CLINICAL DIAGNOSIS

It is necessary to state the final clinical diagnosis.

PROGNOSIS. PREVENTIVE MEASURES

It is necessary to formulate the prognosis for the patient's life, health and working ability. Methods of preventing the disease, the duration of the case follow-up, cure criteria should be recommended.

EXTENDED EPICRISIS

While composing the epicrisis the student should state the following information:

1. Patient's surname, name and patronymic, her age and address.
2. The date and time of admission, date of discharge, medical institution and department where the patient was being treated.
3. The diagnosis made at the referring institution.
4. Final clinical diagnosis.
5. The examination performed in hospital and the treatment administered to the patient. Blood components transfusions, complications.
6. Findings of the histological investigation of the biopsy sample.
7. Surgical interventions performed; their complications. The condition of the perineal wound or that one on the anterior abdominal wall by the day of discharge, stitches (removed or not).
8. Consultations given by specialists (including related medical specialists).
9. Gynecological status on the day of discharge.
10. The duration of being on a sick-leave; the date of the next appointment with gynecologist (if the patient is not well yet).
11. Effect of the in-patient treatment.
12. Recommendations given on discharge:

- work and rest regime, diet, hygiene;
- the duration of sex abstinence;
- methods and duration of contraception;
- out-patient treatment (substantiate the medicines prescribed, indicate the purpose of their administration, the dose to be taken, the multiplicity and route of administration, the duration of the course. Substantiate the administration of the course of physiotherapy or sanatorium-resort therapy);
- the necessity for surgical treatment;
- the duration of the case follow-up.

The case history should be signed by the supervising teacher.

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