
ONMedU, Department of Obstetrics and Gynecology. Practical lesson № 26.
Benign tumors of the female genitalia. Dishormonal diseases of breasts. Endometriosis.

**MINISTRY OF HEALTH OF UKRAINE
ODESA NATIONAL MEDICAL UNIVERSITY
DEPARTMENT OF OBSTETRICS AND GYNECOLOGY**



CONFIRMED by

Vice-rector for scientific and
pedagogical work

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THE METHODOICAL RECOMMENDATIONS FOR PRACTICAL CLASS

International Faculty, Course VI

Discipline “Obstetrics and Gynecology”

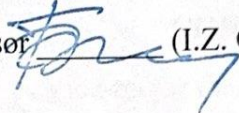
Practical lesson №26. Topic: Benign tumors of the female genitalia. Dishormonal diseases of breasts. Endometriosis.

Methodical development of a practical lesson. «Health care», master's degree in the specialty
"Medicine". Discipline “Obstetrics and Gynecology”


Approved:

Meeting of the Department of Obstetrics and Gynecology of Odesa National
Medical University

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Practical lesson № 26.

BENIGN TUMORS OF THE FEMALE GENITALIA. DISHORMONAL DISEASES OF BREASTS. ENDOMETRIOSIS.

LEARNING OBJECTIVE is to acquaint the students with the issues of clinics, diagnostics and treatment of benign tumors of the female genitalia. To know the classification of kinds of benign tumors of the female genitalia. To acquaint the students with the issues of clinics, diagnostics and treatment of endometriosis.

BASIC CONCEPTS:

Definition of cyst and tumor of ovary.

Cyst of Bartholin gland: clinics, diagnostics, complications, treatment.

Tumor-like masses in ovaries: clinics, diagnostics, complications, treatment, tactics of GP.

Benign tumors of ovaries (epithelial, tumors of genital cord stroma, lipid-cellular, germ cell tumors): clinics, diagnostics, complications, treatment, tactics of GP.

Benign tumors of uterus: clinics, diagnostics, complications, treatment, indications to surgical treatment, tactics of GP.

Endometriosis: etiology, pathogenesis, classification, clinics, diagnostics, modern treatment methods, tactics of GP, methods of rehabilitation of reproductive function.

EQUIPMENT

- Multimedia equipment (computer, projector, screen), TV.
- Obstetric models and obstetric instruments (pelvimeter, obstetric stethoscope, centimeter tape).
- Professional algorithms, structural-logical schemes, tables, videos.
- Results of laboratory and instrumental researches, situational tasks, patients, medical histories.

EDUCATIONAL TIME – 4 h

A. ORGANIZATIONAL STAGE

- Greetings,
- checking attendees,
- defining of educational goals,
- providing of positive motivation.

Now there is a significant increase in the incidence of fibroids. Thus, the incidence of all, who goes to the clinic amounts to 15-17%. In recent years become common cases of uterine cancer disease in women of childbearing age (30-35 years). Increased incidence of uterine cancer bind with the influence of environmental factors, work svyazanoy hazardous production factors, neuropsychiatric surge. Sered tumors of the female genital tumors of the ovaries is second only to cervical cancer. The diversity of the structure and origin of ovarian tumors due to their participation in the structure of different histological structure, origin and embryogenesis cells with different hormone and secretion.

Endometriosis is marked in 7-50% of menstruating women, during menopause it does not always regress and in 1-2% of the cases it continues as malignant. The frequency of recurrence of endometriosis changes from 2% up to 47%. At the same time, endometriosis in healthy women is observed in 5-20% of the cases and in more than 60% of patients with infertility and/or pelvic pains.

CONTROL OF BASIC KNOWLEDGE (written work, written testing, online testing, face-to-face interview, etc.)

2.1. Requirements for the theoretical readiness of students to perform practical classes.

Knowledge requirements:

- Communication and clinical examination skills.
- Ability to determine the list of required clinical, laboratory and instrumental studies and evaluate their results.
- Ability to make a preliminary and clinical diagnosis of the disease
- Ability to perform medical manipulations
- Ability to determine the tactics of physiological pregnancy, physiological labor and the postpartum period.
- Ability to keep medical records.

List of didactic units:

1. The etiology and pathogenesis of uterine fibroids;
2. Classification of uterine fibroids and their frequency;
3. The basic principles of diagnosis, treatment and prevention of uterine fibroids;
4. The classification of benign ovarian tumor they differ from ovarian tumors and malignant tumors;

5. The role of preventive examinations in a timely diagnosis and follow-up features for patients with tumors of the ovaries.

2.2. Questions (test tasks, tasks, clinical situations) to test basic knowledge on the topic of the class.

Questions:

1. If necessary, determine the cervical canal, uterine cavity length, presence of tumor in it, use:

A. Cervical Biopsy

B. colposcopy

C. laparoscopy

+ D. Sounding the uterus

2. Benign tumor of epithelial tissue:

A. fibroma

B. Hidradenoma

C. Lipoma

+ D. Papilloma

E. Carcinoma

3. In '40 women during routine inspection at a bimanual examination revealed a tumor of the ovary. The disease is not accompanied by clinical manifestations. What additional methods are needed to confirm the diagnosis?

+ A. Ultrasound examination of the pelvis

B. Functional diagnostic tests

C. Pnevmooperitoneografiya

D. Measurement of basal temperature

E. Puncture the abdominal cavity through the posterior vaginal vault

4. Urgent received patient complaining of acute abdominal pain that arose during exercise, fever, general weakness. From history we know that during the medical examination revealed a tumor of the ovary left. Objectively: skin pale, pulse 120 beats / min., BP 90/60 mm Hg When bimanual and ultrasound in tumor appendages found. In Douglas space defined by a large amount of free fluid. What is the possible diagnosis?

-
- A. Polycystic ovarian disease
 - B. Impaired tubal pregnancy
 - C. Torsion stem tumor of the left ovary
 - + D. Rupture of ovarian cysts
 - E. Apoplexy left ovary

5. The patient '30 complaining of pain in the left iliac region, which began after the sudden movements 5 hours ago. Menses 3 weeks ago. Palpation stomach pain in the lower, more to the left. Symptom Pasternatskogo negative on both sides. The uterus is a normal size, anteflexio, displacement occurs when pain in the left appendages. Right appendages are not clearly palpable. To the left of uterine tumor formation is determined sharply painful on palpation. The most likely diagnosis?

- + A. Torsion legs cystoma left ovary
- B. Ectopic pregnancy
- C. Left-sided renal colic
- D. Necrosis subserous fibromatous unit
- E. Apoplexy left ovary

6. In mothers 40 years with full-term pregnancy and izlivshimisya 8 hours ago amniotic fluid in the vaginal examination revealed myoma node, which comes from the front wall of the lower uterine segment, performing pelvic cavity. Above the head node is highly fetus. Made of delivery by caesarean section followed by hysterectomy without appendages. What was the determining factor in choosing the tactics of delivery and amount of surgery done?

- A. Age of mothers
- + B. The localization of the tumor and its size
- C. Burdened obstetric history
- D. The total duration of anhydrous period
- E. Term pregnancy

7. The patient '38 years with complaints of recurring pain in the abdomen, left over. Menstrual function is not impaired. In patients with chronic inflammation of the uterus, treated as outpatients. Uterus in antefleksii not enlarged, painless; right appendages are not defined, palpable left ovoidnoy forms of education 10 x 12 cm with a smooth surface texture tuhoelastichnoyi, movable, painless smooth; deep vault; mucus. What is the most likely diagnosis?

-
- A. exacerbation of chronic salpingo of education left tuboovarian
 - B. Uterine fibroids underbelly of a single node
 - + C. Cystoma left ovary
 - D. Ovarian Cancer
 - E. endometrioid ovarian cysts left

8. The patient '38 years with complaints of recurring pain in the abdomen, left over. Menstrual function is not impaired. In patients with chronic inflammation of the uterus, treated as outpatients. Uterus in anteflexii not enlarged, painless; right appendages are not defined, palpable left ovoid form of education 10 x 12 cm with a smooth surface texture tuhoelasticheskoy, movable, painless smooth; deep vault; mucus. What research shows an outpatient basis?

- A. Ultrasound of organs
- B. X-ray or endoscopic research of the stomach and intestines
- C. Extended colposcopy
- + D. All of the above
- E. None of the above

9. The patient ' 38 years with the complaint of recurring pain in the abdomen, left over. Menstrual function is not impaired. In patients with chronic inflammation of the uterus, treated as outpatients. Uterus in anteflexii not enlarged, painless; right appendages are not defined, palpable left ovoid form of education 10 x 12 cm with a smooth poverhniy, tuhoelasticheskoy texture, movable, painless smooth; deep vault; mucus. Prenatal doctor's tactics?

- A. Refer patients in Oncology Center to decide on a treatment strategy
- B. Ask the sick in clinical records, recommended re-examination after 1 month
- C. a course of antibiotic therapy in the absence of effect - hospitalization
- D. urgently hospitalize the patient to perform surgery
- + E. Planned hospitalization for surgical treatment

10. Metrorrhagia is pathognomonic symptom at:

- A. subserous uterine myoma
- + B. submucous uterine myoma
- C. interstitial version of uterine fibroids

D. Inflammatory diseases genital

E. ovary apoplexy.

FORMATION OF PROFESSIONAL SKILLS (mastering skills, conducting curation, determining the treatment regimen, conducting a laboratory study, etc.).

3.1. Content of tasks (tasks, clinical situations, etc.).

Interactive task:

Students of the group are divided into 3 subgroups of 3-4 people each. They work in the classroom, reception department of the maternity or gynecological hospital, surgery room.

Tasks:

- Subgroup I - Gather special gynecologic anamnesis. Prepare a plan of inspection sick with various kinds of gynecological diseases. Make the plan of preoperative preparation at planned and urgent gynecologic operations. Management of the postoperative period.
- Subgroup II - Perform gynecological examination- Taking material from the vagina, cervical canal and urethra for examination.- Evaluate: the results of urogenital smear microscopy, cytological examination, colposcopy; results of bacteriological and other methods; results of ultrasound examination; results of functional tests
- Subgroup III – to assess answers of subgroups I and II and makes adjustments.

Tests:

Direction: For each of the multiple- choice questions select the lettered answer that is the one best response in each case.

1. For the clinical manifestations of dysmenorrhea are not typical:
 - A. Headache
 - B. Nausea
 - C. Excessive blood loss
 - D. Abdominal pain
 - E. Irritability

2. An 18-year-old girl with normal development of secondary sexual signs complains of primary amenorrhea. Examination revealed that the vagina is underdeveloped, the uterus is absent. Specify the type of amenorrhea:

- A. Physiological amenorrhea.
- B. Amenorrhea, caused by hyperandrogenia.
- C. Hypogonadotric amenorrhea
- D. Eugonadotropic amenorrhea.

3. A 24 year old patient complains of amenorrhea. She had labor 13 months ago. Delivery was by caesarian section due to premature detachment of a normally located placenta and intrauterine asphyxia of the fetus. Labor was complicated with a massive blood loss of approximately 2000 ml due to coagulopathy. What test is indicated in this patient?

- A. Ultrasound of the organs of the small pelvis
- B. Testosterone blood test
- C. Progesterone test
- D. Gonadotropins test
- E. Computer tomography of the head

4. A 20 year old patient complains of periodic menstruation delays for 2-4 months during the last 2 years. She noticed excessive hair growth on the anterior abdominal wall, mammary glands, and lower extremities. During the last year she gained 14 kg weight. Speculum examination: cervix is conic, external os is closed, epithelium is whole. Body of uterus is in anterflexio, small, mobile, painless. Ovaries are palpated on both sides of the uterus, 4x6 cm, painless, firm. Posterior fornix is deep. Discharge is mucous. What is the most probable diagnosis?

- A. Adrenogenital syndrome
- B. Itsenko-Cushing syndrome
- C. Adenoblastoma of ovaries
- D. Stein - Leventhal syndrome (Polycystic ovarian syndrome)
- E. Sheehan's syndrome

5. A 15 year old girl complains of bloody discharge from the vagina for 2 weeks, which began after a 3 month delay of menstruation. Menarche at 13 years. Irregular menstrual cycle. Blood analysis: Hb - 90 gr/l, erythrocytes - $2,0 \times 10^{12}/l$, leukocytes - $5,6 \times 10^9/l$. Rectal exam: the uterus has a normal size, the appendages are not palpated. What diagnosis is most probable?

-
- A. Juvenile bleeding
 - B. Incomplete abortion
 - C. Blood clotting disorder
 - D. Polyp of the endometrium
 - E. Cancer of the endometrium

6. A 27 year old patient complains of irregular menstruation, infertility for 4 years. Obesity, hypertrichosis. During bimanual examination: the uterus is small, the ovaries on both sides are enlarged, firm. Discharge - leucorrhoea. Examination showed that the basal temperature is monophasic. What is the diagnosis?

- A. Sheehan syndrome
- B. Simmonds syndrome
- C. Polycystic ovarian syndrome
- D. Genital tuberculosis
- E. Asherman syndrome

7. The uterine form of amenorrhea can result from all specified below diseases, except:

- A. None of the below ovarian cyst
- B. Frequent curettage of the uterine cavity
- C. Genital infantilism
- D. Chronic inflammation nonspecific etiology
- E. Tuberculosis of endometrium

8. What is not used for diagnosis of disorders of the menstrual cycle?

- A. Tests of functional diagnostics
- B. Investigation of the hormone levels in the blood
- C. X-ray of Turkish saddle
- D. Determining the level of TTH
- E. Use all of the above

9. A 36 year old patient came to the female consultation with complaints of increased irritability, tearfulness, headache, and palpitation, edema of the hands and

feet, decreased urination, engorgement of the mammary glands. These symptoms occur and gradually increase some days before menstruation and disappear at the beginning of menstruation. The menstruation cycle is not dysfunctional. The listed complaints began last year. What is the diagnosis?

- A. Climacteric syndrome
- B. Shihane syndrome (postnatal hypopituitarism)
- C. Premenstrual syndrome
- D. Stein-Leventhal syndrome
- E. Adrenogenital syndrome

10. A 35-year-old woman was addressed to the doctor 3 months ago with complaints of irregular profuse menstrual bleeding. The doctor administered oral contraceptives for 2 months. Despite of using oral contraceptives, bleeding continued. What is the conducting tactics?

- A. Curettage of the uterus mucous membrane
- B. Combined oral contraceptives
- C. Estrogen
- D. Nonspecific anti-inflammatory treatment
- E. Progestin.

3.2. Educational materials, recommendations (instructions) for performing tasks

Definition of cyst and tumor of ovary.

Ovarium is place, where mass lesions occur very often, and as a rule its growth is connected with physiological cysts or tumors.

Classification you can find in your text-books. Turn your attention to the functional cysts of ovarium: follicular cysts and corpus luteum cyst.

Follicul becomes cystic as an answer to the stimulation of gonadotropin hormones. If ovulation didn't happen as a rule takes place atresia of follicle. Follicular cyst appears when ripe follicle doesn't burst open and thus ovulation cannot take place. Such state slows follicular phase of the cycle and can lead to oligomenorrhea and secondary amenorrhea.

If the cyst in ovarium is lesser than 2 cm it is called cystic follicle, if it is bigger than 2 cm it is called follicular cyst.

As a rule, there are no symptoms and follicular cysts involute by themselves during 2 months.

But follicular cysts can also grow up to 5 cm and more and cause mild stomach ache and interrupt menstrual cycle.

Apoplexia of follicular cyst is a severe complication that causes acute pain in abdomen and clinical picture of acute abdomen. The patient needs emergency surgery.

Corpus luteum cysts appear after ovulation if there were no regression of corpus luteum during lutein phase of the cycle. Clinical picture: menstruation delay from a couple of days to a couple of weeks, menstrual blotches and pain in the low regions of abdomen. (Here we should have differential diagnosis with gravidas extra uterine – ectopic pregnancy).

Corpus luteum cysts can also grow until spontaneous hemorrhage under cystic capsule takes place.

Diagnostics:

- bimanual examination
- ultrasound
- CT and MRI

As a rule functional cysts have no symptoms and cysts involute by themselves during 2 months.

Also cysts regression can be caused by proscriptio of combined oral contraceptives daily for 4-8 weeks.

If the cyst doesn't regress for 3 months it should be operated.

1. Tumors of the Ovary

1.1 Sex cord-stromal (gonadostromal) tumors

1.1.1 Granulosa cell tumor (granulosa-theca cell tumor)

1.1.2 Thecoma (theca cell tumor)

1.1.3 Interstitial cell tumor (luteoma, lipid cell tumor, steroid cell tumor)

1.2 Germ cell tumors

1.2.1 Dysgerminoma

1.2.2 Teratoma

1.2.3 Embryonal carcinoma

1.3 Epithelial tumors

1.3.1 Papillary adenoma, papillary cystadenoma

1.3.2 Papillary adenocarcinoma

1.3.3 Rete adenoma

1.4 Mesenchymal tumors

1.4.1 Hemangioma

1.4.2 Leiomyoma

2. Tumors Metastatic to the Ovary

3. Tumorlike Lesions of the Ovary

3.1 Adenomatous hyperplasia of the rete ovarii

3.2 Papillary hyperplasia of the surface epithelium

3.3. Stromal hyperplasia

3.4 Vascular hamartoma

4. Cysts in and around the Ovary

4.1 Cysts in the ovary

4.1.1 Graafian follicle cysts

4.1.2 Luteinized cysts

4.1.3 Epithelial inclusion cysts in the mare (fossa cysts)

4.1.4 Cysts of the subsurface epithelial structures in the bitch

4.1.5 Cystic rete ovarii

4.2 Cysts around the ovary

4.2.1 Cysts of wolffian (mesonephric) tubules and ducts

4.2.2 Cysts of müllerian (paramesonephric) duct

5. Tumors of the Uterine Tube (Oviduct)

5.1 Epithelial tumors

5.1.1 Adenoma

5.1.2 Adenocarcinoma

5.2 Mesenchymal tumors

5.2.1 Lipoma

6. Tumors of the Uterus

6.1 Epithelial tumors

-
- 6.1.1 Adenoma of the endometrium
 - 6.1.2 Adenocarcinoma of the endometrium
 - 6.2 Mesenchymal tumors
 - 6.2.1 Fibroma
 - 6.2.2 Leiomyoma
 - 6.2.3 Leiomyosarcoma
 - 7. Gestational Trophoblastic Disease
 - 7.1 Subinvolution of placental sites in the bitch
 - 8. Tumorlike Lesions of the Uterus
 - 8.1 Adenomyosis of the uterus
 - 8.2 Cystic endometrial hyperplasia
 - 8.3 Endometrial cysts
 - 8.4 Endometrial polyp
 - 8.5 Lymphangiectasia
 - 8.6 Wolffian (mesonephric duct cysts)
 - 8.7 Serosal cysts
 - 9. Tumors Metastatic to the Uterus
 - 10. Tumors of the Cervix
 - 11. Tumors of the Vagina and Vulva
 - 11.1 Epithelial tumors
 - 11.1.1 Papilloma
 - 11.1.2 Fibropapilloma of cattle
 - 11.1.3 Squamous cell carcinoma of the vulva
 - 11.1.4 Urothelial carcinoma involving the canine vestibule
 - 11.2 Mesenchymal tumors
 - 11.2.1 Leiomyoma
 - 11.3 Transmissible venereal tumor
 - 12. Tumorlike Lesions of the Vulva and Vagina
 - 12.1 Cysts

12.2 Edema of the vulva

Classification of ovarian tumors:

1. epithelial tumors: papillary adenoma; papillary adenocarcinoma; cystadenoma; undifferentiated carcinoma;
2. germ cell tumors: dysgerminoma; teratoma;
3. sex cord-stromal tumors: granular cell tumors; thecoma; luteoma;
4. connective tissue tumors;
5. secondary (metastatic) tumors;
6. unclassified tumors;
7. tumor-like lesions: adenomatous hyperplasia of the rete ovarii; papillary hyperplasia of the ovarian serosae; vascular hamartoma; ovarian cysts.

Epithelial tumors develop from the surface epithelium of the ovary, which is coelomic mesothelium. Papillary adenoma, papillary cystadenoma, is a frequently bilateral tumor, usually on the surface of the ovary, developing from the surface epithelium, infiltrating as a tubular invagination in subepithelial structures.

Papillary adenoma, ovary.

Microscopically, the tumor develops under a papillary and cystadenomatous form, having small polygonal, cuboid or cylindrical cells, sometimes with cilia. The stroma is discrete but well vascularized, being distributed around the cells ranged in a single layer, under a pseudoglandular form, delimiting small spaces, irregular cavities, having a fluid protein content.

Cystadenoma has been diagnosed in dogs, being frequently found in association with cystic endometrial hyperplasia. Papillary cystadenomas in bitches may contribute to the appearance of ascites, by the secretion of tumor cells. Tumor formations develop bilaterally, with variable sizes: they can be small, difficult to detect, or they may appear as irregular masses more than 10 mm in diameter.

Cystadenoma

Adenoma of subsurface epithelial structures. Ovary

Cystadenoma located in the ovarian bursa has a cauliflower-like aspect and frequently disseminates by implantation in the peritoneum. The cystic aspect of the tumor is also maintained in section.

Papillary adenocarcinoma, ovary.

Papillary adenocarcinoma is a tumor frequently found in the canine ovary, usually bilateral, being histologically similar to the benign form, papillary adenoma. The characteristics that differentiate the malignant and benign forms are: tumor size; the mitotic index; invasion of ovarian stroma and extension in the ovarian bursa, in the peritoneum, frequently with metastases by implantation. Cells have a cuboid shape, lying on fine stromal septa, frequently with digital projections in the cystic microcavities, having a clear or slightly pink protein content. More rarely, tumor cells contain mucin or a squamous change (adenocarcinoma). Undifferentiated carcinoma is a form of carcinoma composed of poorly differentiated cells whose type is difficult to establish.

Germ cell tumors originate from primordial ovarian germ cells, similar to testicular germ cells. Embryonic carcinomas have not been described in animals. Dysgerminomas and teratomas have. Metastases represent 20–30%, with locations in abdominal viscera, lymph nodes, bones and lungs. Dysgerminoma, which is also known as embryonic carcinoma, large cell carcinoma and ovarian seminoma, is relatively frequent. Metastases are found in 10–20% of cases, and hormone secretory activity is absent, generally appearing in old bitches.

Dysgerminoma.

Microscopically, the tumor is formed by a uniform cell population, large round or polygonal cells, with poorly colored cytoplasm, similarly to seminoma. Nuclei are of variable sizes, vesicular, with 1–3 nucleoli, similar to spermatogonia. Giant cells and mitotic forms are frequently identified. Cells are diffuse or arranged in islands or layers. The connective stroma is variable, but is frequently in a low amount. Lymph node or perivascular formations are frequently noted, and large histiocytes, with clear cytoplasm, occasionally appear

Teratoma

These tumors are well differentiated and benign. A tumor thought to arise from totipotential germ cells that have undergone somatic differentiation and given rise to two or more of the embryonic layers with a variety of tissues being present. Embryonal carcinoma, a germ cell tumor composed of embryonic multipotential cells that are capable of further differentiation, producing a varied histologic pattern. Normal tissues can be structurally identified along with neoplastic tissues, with solid and cystic areas, containing sebaceous material and hair, sometimes skin, cartilage, bone, teeth and muscles, at other times neural, adipose tissue or respiratory epithelium. A reasonable explanation for the appearance of teratoma could be heterozygosity, as a result of meiotic division. Evidence for this is provided by a number of biochemical and cytogenetic studies showing that ovarian teratoma tissues are unique, in the sense that they are formed by XX diploid cells, but are homozygous in chromosomal loci for which the host is heterozygous.

Sex cord-stromal (gonadostromal) tumors are formed from the gonadal, medullary or cortical stroma, from granulosa cells and theca interna cells. These neoplasms have the capacity to secrete hormonally active steroids (estrogen and/or progesterone). The classification of sex cord-stromal tumors depends on the type predominance and cell origin. Clinically, cows and mares with sex cord-stromal tumors may have an unchanged behavior or they can present the signs of an oversecretion of estrogens and androgens. The manifestation of abnormal signs can last for several months, one year or more. Mares' manifest nymphomania or behave like stallions, and cows have the same behavior. The behavior of animals with ovarian sex cord-stromal tumors is deeply changed. Macroscopically, the tumor ranges between 4 and 16 cm in diameter, it has a soft to dense nodular consistency. In section, dense areas, cysts and frequent hemorrhages and/or necroses are found, of white-gray or yellow color.

Granulosa cell tumor with luteinization.

Granulosa - theca cell tumor.

Microscopically, cells are similar to normal granulosa cells, appearing as a uniform population, with poorly colored cytoplasm, poorly delimited, with round or ovoid eccentric nuclei, few or no mitoses.

Neoplasms formed by granulosa cells have a microfollicular structure, with follicles of variable sizes, lined by cells similar to follicular epithelium, to normal de Graaf follicle [6]. Cells are arranged in one, two or more layers. The lumen of microfollicles contains acidophilic homogeneous or granular material. Follicular cells can appear in the lumen, suggesting a cumulus oophorus aspect (Fig. 10.9), or proliferations can be of papillary type, similar to a cystic papillary carcinoma. Tumor cells under the form of solid masses or small rosettes have been noted, suggesting embryonic follicles. Neoplastic cells are round or ovoid, fusiform, similar to normal follicular cells. Sizes are variable, with round or ovoid hyperchromatic nuclei, the cytoplasm is vacuolated. Mitoses are present, sometimes in a high number.

Granulosa - theca cell tumor. Sertoli-like tumor.

Sertoli cell tumors are formed by elongated cells, frequently with sharp tips, with foamy or clear cytoplasm, with small uniform nuclei. Mitoses are in a low number. Cells are arranged in tubular columns, bundles or clusters, separated by fine connective tissue septa. Non-specific gonadal tumors are formed by cells similar to granulosa cells. Mitoses are rare and anaplastic foci appear. In cats, granulosa cell tumors are predominant. Cells are small, with eccentric hyperchromatic nuclei; cells

form microfollicles or Call Exner bodies with tumor cells arranged radially around eosinophilic material. Mitoses and cellular atypias are obvious. In this species, a tumor with lipid, round, uniform and well delimited cells can appear, some of which are similar to Leydig cells.

Tecoma

Thecoma or theca cell tumor is exclusively composed of theca cells, which are fusiform or stellate, well delimited, arranged in bundles. Nuclei are ovoid, elongated or fusiform, the cytoplasm is pale, with lipid drops. Usually, thecoma is a benign tumor with expansive growth, without metastases. Macroscopically, the tumor is large, of yellow-brown color. Microscopically, it is formed by a population of large, uniform lutein cells, similar to those of the corpus luteum. Lipid cell tumors and Leydig cell tumors have been identified. Lipid cell tumors are known in cats. Histologically, they are formed by large cells, loaded with lipids, similar to those of the adrenal cortex, with small nuclei and well delimited margins.

Leydig cell tumors have a low incidence. Cells are uniform in shape and size, polygonal, well delimited, with dark, granular cytoplasm, with numerous lipid vacuoles. Nuclei are small, ovoid and hyperchromatic, with small nuclei and numerous mitoses. The connective stroma is fine, with numerous capillaries, delimiting in some tumors pseudolobular forms.

Benign tumors of uterus. Clinics, diagnostics, complications, treatment, prophylaxis.

Myoma of the uterus is a benign tumor that proceeds from unstriated muscles of the uterus and is the most widespread tumor of female reproductive system.

Etiological factors of myoma genesis are still unknown for sure, but it is stated that myoma grows under estrogen influence.

Classification. 95% of myoma origin from uterus itself, 5% - from cervix. 80% of women have multiple myomas.

- subserous myoma – grows under serous tunic. Subserous myomas can be pedunculated.
- intramural myoma grows in the body of uterus. Being small this myomas don't usually deform uterus, but by growing they change outlines of uterus and it becomes asymmetrical and can obtain nodulated form. Big myomas can grow up to serous and mucous tunics.
- submucous myoma is quite rare but is very dangerous because it can cause severe hemorrhage or be infected with succeeding infection spread in the other layers or the whole uterus. Submucous myomas as a rule grow after 40-years age. In

anamnesis such women may have abortions or intrauterine procedures, that disturb normal reproductive work in myometrium. Submucous myomas can be pedunculated and protrude into vagina through the cervical channel (abutting myoma).

- intraligamentary myoma is characterized by lateral growth or origin from lig. latum uteri
- cervical myoma as a rule grows on the rear side of cervix and don't have much symptoms. But if cervical myoma grows on the front side of cervix it causes symptoms of urine bladder compression.

Clinical picture varies and depends upon the term of the disease, age of a patient, size and localization of myomas.

The most often complaints are:

- pain, including algodysmenorrhea
- bleeding (menorrhagia with the growth of period and volume of bleeding)
- compression symptoms as a result of huge or multiple myomas
- laboratory studies: anemia as a result of menorrhagia, leucocytosis and erythrocyte sedimentation rate increase as a result of infection.

Diagnostics

The main role in diagnostics holds bimanual examination (because you can palpate enlargement of the uterus and often the outlines of myomas) and ultrasonography (that enables to visualize myoma and shows its real size and location).

Besides we use CT (computerized tomography), MRI, diagnostic curettage and hysteroscopy.

Treatment

Treatment can be conservative or surgical.

Patients with myoma receive follow-up care (dispensary observation). All patients are recommended rational diet (fresh fruits and vegetables, restriction of carbohydrates and fats), vitamins, especially B1, B6, B12, C and E.

Conservative treatment is recommended to patients with intramural and subserous myomas, when the size of the uterus is lesser than 12 weeks of pregnancy size, and if women don't have meno- or metrorrhagia.

The goal of drug treatment is to normalize hormone level in patients with myoma. They are prescribed progestagens (norkolut, depo-provera), antigonadotropins (danazol), agonists of GnRH (zoladex).

If the size of myoma is over 12 weeks of pregnancy size, or woman develops severe symptoms we use surgical treatment.

Absolut surgical indications are:

- big size of myoma and uterus size is over 12 weeweeks of pregnancy
- symptoms (severe pain)
- annexa dysfunction (dysfunction of neighboring organs)
- anemia (as a result of profuse bleeding)
- quick growth (more than 5 weeks of pregnancy size for a year)

Surgical treatment can be conservative myomectomy or radical (that is used if woman has other pathology of the utherus, have huge, multiple or cervical myomas).

The most important complications of myoma is necrosis and aborting myoma (protruding into vagina through cervix channel). These pathologies have a clinical picture of acute abdomen and must be operated as soon as possible.

Cyst of Bartholin gland: clinics, diagnostics, complications, treatment.

If there is a sharp narrowing (stenosis) or complete closure of the Bartholin gland duct disrupted normal flow continuously formed secret. Naturally, the secret begins to accumulate in the breast cavity and throughout the channel. There is swelling and inflammation of the prostate, its walls are sealed - a cyst is formed. Sizes can vary from small (1-2 cm) to large (5-8 cm).

Usually gland cyst occurs when: - infection of the prostate ducts and sexually transmitted diseases (such as gonorrhea, chlamydia, ureaplasma, mycoplasma and trichomonas); - with vaginal candidiasis (thrush) - with rapid reproduction of conditionally pathogenic flora due to a weak immune system (E. coli, streptococcus or staphylococcus). Development of Bartholin's gland cyst helps: - Violation of personal hygiene, - Skin injury and labia with hair removal, shaving; - Wearing tight underwear and breathable; - Abortion, or other gynecological procedures and interventions; - Irregular, but very intense sexual intercourse, multiple, with grated and injuries. If the conditions are unfavorable existence of cysts can form infection, pus accumulation and the formation of an abscess.

Clinics. If a Bartholin gland cyst is not complicated, it usually looks like a round, painless swelling of the hearth in the labia majora, closer to the anus. With a small amount, for a cyst may not be visible, it detects a gynecologist at the next inspection. If a Bartholin gland cyst grows to a significant size, possible discomfort when walking, wearing tight clothing during intercourse. The cyst may be complicated by suppuration, then there is the formation of a painful abscess. At its

formation fever, symptoms of poisoning (nausea, weakness) appear, health deteriorates. At the site of a cyst formed tumor formation up to 10 cm, it is sharply painful, can pulsating, it gives a feeling of fullness in the perineal area. In all movements the pain intensifies. When spontaneous dissection gland abscess, leaking pus comes out, in parallel, signs of genital infections - vulvitis, vaginitis, abnormal vaginal discharge.

Diagnostics. Diagnosis and treatment of Bartholin gland cyst is engaged gynecologist, in complicated forms can be connected to a surgeon for an operation. Initial diagnosis is based on examination in the gynecological chair. When a Bartholin's gland cyst is carried out from the vagina smear microscopy and culture to determine the microbial composition, with the exception of infections transmitted through sexual contact. According to the results of sowing is carried out selection of antibiotics for treatment.

Treatment. When cysts are small, 1-2 cm, causing physical discomfort and inflamed, do not use active methods of treatment, especially surgery. You can select the observation tactics - often completely resolve the cyst due to spontaneous outflow of establishing secret. Such cysts are removed by the patient's desire, especially with frequent relapses or aesthetic purposes. If the cyst sizes are large enough, there is discomfort when driving or sexual intercourse, need surgical correction. It is aimed at restoring the normal outflow of fluid from the prostate gland. Applied methods: Opening and drainage of the cyst (setting a special drainage tube, with the creation of conditions for draining secretions). The method has low efficiency, frequent relapses (re-formation of cysts). Often, after several relapses have to remove the gland itself. Bartholin gland cyst puncture - puncture needle with suction contents. This type of operation is carried out in pregnant women and during temporary inability operation. All these methods do not give full guarantee of cure, recurrence of the cyst with resorting to the complete removal of the entire gland. When festering Bartholin's gland cyst, abscess formation, it is a compulsory autopsy, removing the pus and drainage. Only after this can be carried out one of the above methods for forming duct.

After surgery, treatment is supplemented by physical therapy techniques, thorough elimination of sexually transmitted infections and immunotherapy. Complications. Major complications include chronic Bartholinitis - inflammation of the Bartholin gland. Another serious complication is the abscess cyst with abscess formation. Purulent focus can break out and formed a fistula, or may be a breakthrough in the pelvic area and internal genital organs. Even with careful treatment of Bartholin's gland cyst and carrying out of operative treatment relapse can occur, and cysts are formed again and again.

Endometriosis. Etiology and pathogenesis. Classification. Diagnostics. Clinics. Modern treatment methods. Medical rehabilitation in women with endometriosis.

Endometriosis – is a “mysterious disease” with unknown etiology and pathogenesis with many faces. By classic definition says that – endometriosis is a progressive, usually degenerative hormone-dependent pathology nature of which is in presence of epithelial and stromal elements, which are characteristic for endometrium, in ectopic place (outside between mucus tunic of uterus body). In endometrium foci tissues occurs more or less expressed changes according to the menstrual cycle phases.

Nowadays exist 8 theories of origin and development of endometriosis. Endometriosis most-time appears in reproductive age – fro 25 till 40 years. Middle age of patients with endometriosis cysts usually is 30, internal endometriosis – 40 y.o. Very rarely endometriosis can be observed in menopause and before menarche.

It is considered, that after inflammatory diseases of the female genitals and myoma of the uterus, endometriosis takes third place in the structure of gynecologic pathology. By the material of western sources, endometriosis in frequency of occurrence concedes only to myoma of the uterus.

There is a number of theories about the origin and development of endometriosis. The most popular of them today is the Sampson’s implantation theory, which assumes that during menstruation the viable cells of the endometrium retrograde penetrate through the fallopian tubes and are implanted onto the neighboring pelvic structures. Due to the similar mechanism, the viable cells of the endometrium can be implanted onto open wounded surfaces during cesarean section or along the birth canal. Detecting foci of extra-genital endometriosis, Halban’s vascular transport theory explains that during menstruation the viable cells of the endometrium get in the open lymphatic and blood vessels of the basal endometrium, by which they are transported to remote ectopic centers.

The metastatic theory of origin of endometriosis proves to be true by a number of factors: 1) position of pelvic endometriosis, first of all on the surface of the ovaries and fallopian tubes; 2) high frequency of retrograde distribution of menstrual endometrium through the fallopian tubes; 3) viability of desquamated menstrual endometrium and its ability to grow in a tissue culture; 4) frequent development of endometriosis during congenital atresia of the cervix uterus and vagina; 5) frequent development of endometriosis in the wall of uterine-pelvic and uterine-abdominal fistulas in experimental animals and people; 6) development of endometriosis after ligating the fallopian tubes in the upper section of the proximal segment of the tube.

The metaplastic (aberration) theory is based on the genetic relationship of the pelvic peritoneum with mesoepithelium and the Muller’s ducts which develop from it.

Confirmation of this theory:

-
- 1) Presence of endometriosis in women with congenital hypoplasia of the uterus and amenorrhea;
 - 2) Presence of endometriosis in men with its primary location in the urogenital areas;
 - 3) Experimental supervision of endometrioid metaplasia of the peritoneum;
 - 4) Presence of other metaplastic tissue (smooth muscle, epithelium of the endocervical and tubal type in the foci of endometriosis);
 - 5) Comparable disseminated forms of endometriosis with other similar affects of the peritoneum of the metaplastic type, for example, disseminated leiomyomatosis or endosalpingiosis of the peritoneum.

It is also possible the combination of metastatic and metaplastic processes, when the metastasis of a section of tissue of the endometrium causes a corresponding metaplastic answer of the local tissue.

The theory of the embryonic origin of endometriosis, introduced at the end of the last century, finds supporters at the present time. According to this theory, endometrioid heterotopia occurs from the remains of the paramesonephral (Muller's) ducts or embryonic material from which the genitals, including the tissue of the endometrium, are formed. The occurrence of the development of endometriosis in children and teenagers (11-12 years), and also a combination of the given pathological process with developmental anomalies of the urogenital organs, gastrointestinal tract testifies for the benefit of the given theory.

The hypothesis about retrograde menstruation, developed by Koninckx P.R., reflects the popular belief that endometrioid foci in the abdominal cavity are physiological and almost a general phenomenon, since the living cells of the endometrium are found in the peritoneal liquids more than in 70% of women. Thus, all women sometimes have retrograde menstruations and the minimal degree of the disease ("minor forms"). Under normal conditions, the protective system of the peritoneum can surely cope with the reflux of menstrual material: early implants are suppressed and destroyed by the inflammatory reaction initiated by microintroduction. Women with more significant retrograde reflux or suffering from anovulatory follicle syndrome, or with insufficient function of macrophages, decrease in the activity of the natural killer cells in the peritoneal liquid have more chances of disorders in the processes of "self-purification" of the peritoneum and the development of endometriosis into "endometrioid disease". Contamination of the abdominal cavity with menstrual discharge can be caused also by short menstrual cycles, menorrhagia, or by disorders of outflow in patients.

Epidemiological researches have shown that one of the primary risk factors for the occurrence of endometriosis as a disease is a long period of regular menstruations,

without pregnancy. So, the number of menstruations during the reproductive age increased from 30-50 for our grandmothers up to 450 for women of the present generation.

On the other hand, endometriosis is an illustration of a dysfunction of the immune system, which can be hereditary. Numerous researches established a decrease in the activity of the T-cellular link of immunity, its change in receptor device, oppression of the function of the T-suppressor cells, increase in the activity of B-lymphocytic systems with an increase in the amount of G and A immunoglobulin, occurrence of auto-antibodies to tissue of the endometrioid foci.

The studies of western scientists testify about the possible cause and effect relationship of air pollution by dioxin and polychlorinated diphenylam and the occurrence and development of endometriosis.

A majority of the patients with endometriosis find mental disorders: alarm, stress, frustration, emotional instability, depression, the depth which is determined by the duration and severity of disease. While studying the structure of a person, constitutional features, characterizing autisation, affective rigidity, "courage", high vulnerability shown in a low pain threshold sensitivity are revealed.

The correlation of the degree of immune suppression, dysfunction of the ovaries and steroidogenesis and severity of the course of the disease allowed Startsevoj N.V. and co-authors (1996) to consider endometriosis as a psychosomatic disease.

Endometriosis is seen more often in the reproductive period - 25 to 40 years of age. The average age of patients with endometrioid cysts is about 30, internal endometriosis - 40. Rarely does endometriosis have a place in postmenopause and before menarche.

CLINICAL SIGNS OF ENDOMETRIOSIS:

- Character is long, quite often progressive course of disease. Involuntary regress can be in postmenopause period;
- Most constant symptom are pains, which appear or sudden become stronger in premenstrual days; under severe and long course of endometriosis pain can disturb and after menstruation. Painful sense is non-typical for endometriosis of vaginal part of uterus neck, sometimes they were not evident under small foci of endometriosis peritoneum of small pelvis.
- A slight size increase of affected organ or extragenital endometriosis foci can be observed (uterus, ovary) before and after menstruation;
- Character abnormalities of menstrual function, which can often be expressed by algomenorrhea. Under internal and external endometriosis can be observed other

abnormalities - menorrhages, pre- and post- menstrual bloody discharges, menstrual rhythm disturbance etc. patients often complain on dyspareunia;

- Infertility – often satellite of internal and external endometriosis. By different authors data, frequency of infertility compound 46-60% under endometriosis. Its reasons are different and depend on foci localizations. Under internal endometriosis infertility is caused by expressed morphological changes of endo- and myometrium.

Endometriosis is subdivided into:

- Genital;
- Extragenital;

Genital is subdivided into:

- Internal (endometriosis of uterus body);
- External (endometriosis of uterus neck, vagina, retrocervical area, ovariums, uterus tubes, peritoneum, rectal-uterus space)

Extragenital endometriosis include endometriosis of intestine, lungs, urinary bladder, etc.

DIAGNOSTICS

From anamnesis data diagnostic meaning have:

- A. Indications on disease origin after pathologic (operative) delivery, artificial and involuntary abortions, which ended with endometrectomy, diagnostic endometrectomy, other intrauterine intervention or diathermo-coagulation of uterus neck;
- B. Character of pain syndrome, increment of it before and during menstruations;
- C. Unsuccessful long treatment of inflammatory diseases of internal genital organs;
- D. Origin of increase cyclic pain syndrome in juvenile and girls, which appeared after menstruation start;
- E. Abnormality of menstrual function by metrorrhagia type, pre and post menstrual bloody discharges;
- F. Sterility with pain syndrome, which is cyclic type.

Bimanual examination before and in first days after menstruations admit palpation of sacral-uterus ligament and retrouteral area. Some informative importance can have uterus and it uterine appendages increase, especially under expressed affection by endometriosis. Under palpation of sacral-uterus ligaments and retrouterine area. Profundus endometriosis can be suspected under presence one of three signs: under

revealing nodes which were palpated during gynaecological examination; - local sensitivity during gynaecological examination; - node palpation can be provide only under anesthesia.

Transvaginal and transabdominal USD which is done with the next days before menstruation detected pathognomonic signs of internal endometriosis:

- Appearance in myometrium separated parts with increased echogenicity;
- Crenation and irregularity of the endometrium basal layer;
- Dominant increase of frontal-back uterus size and non-central thickening one of its walls;
- Presence in increased echogenicity zones anechogenic inclusions diameter 2-5mm and also liquid cavities diameter 6-33mm, which contain highly dispersed suspension;
- Increased echogenicity in zone of frontal front of formation and reduction – in distant area;
- Detection of closely situated raised and decreased echogenicity lines, which are situated perpendicularly to scan area;

Hysteroscopy is done on 5-7th day of menstruation cycle. Under abnormality – in any day before and after diagnostic curettage and let us determine next criteria: dilatation of gland excretory ducts; uneven, tuberosity of uterus cavity walls; endometriosis “goggles”, wide sinus tracts; multiple dilated gland ducts in all walls of uterus cavity.

Laparoscopic visualization of the pelvis is done at second part of the cycle, but not later than 3-4th day before menstruation. Patognomonic signs of endometriosis are presence of hemorrhagic exudates in abdominal cavity and revealing of foci on small pelvis peritoneum. Typical signs are black foci (“gunpowder burns”), white scars, red polypoid transparent or brown foci and also star-shaped damages, surrounded red-blue implants on ovaries or peritoneal surfaces of uterus, urine bladder or small intestine. Atypical endometriosis was described like pure vesicles, pink implants or white-erythematous areas on all abdominal cavity. During laparoscopy is recommended biopsy of any visible pathologic centers, further display of foci on picture-scheme and final verification of diagnosis under histological examination of biopsy material.

X-ray and MR-image can be used after USD for more exact diagnostic, differential diagnostic of endometrioid cysts from other tumor-like formations of small pelvis organs. Under internal endometriosis are observed: increased sizes of uterus, mostly in frontal-back line, roundedness of its form and determination in myometrium anomaly zones of single or multiply foci with low intensity and

different sizes. This method let us diagnose diffusive, node-like forms, and also stage of disease extension.

Hysterosalpingography can be done on 5-7th cycle day, under this can be observed increase of uterus sizes, contrasting substance situates beyond uterus cavity circuit, and shadows of heterotypes look like tubules, lacunas, diverticulum (internal endometriosis).

Colposcopy can be done by standard method in 2 phase of the cycle – foci were covered with multilayer flat epithelium blue-red color, have hemisphere form, in the place of outpouching of thin epithelium is situated foramen, from which flows dark blood.

Also, examination of the patients with endometriosis must contain estimation of hormone level in blood serum and examination of immune status.

That's why, endometriosis must be supposed in any patient with clinic triad: dysmenorrhea, dyspareunia and sterility. First choice diagnostic must be laparoscopy with histological examination of the tissue sampling.

TREATMENT

Treatment of endometriosis is presented with two variants - hormonal therapy and operative intervention. Combined treatment - operative and conservative, including hormonal, in various combinations is most justified. Medicamentous treatment, mainly, is based on hormonal therapy with use of a whole spectrum of sexual steroids, used independently or in combination, and directed, on the elimination of pain and an increase of fertility.

Age features of endometriosis, its maximal development during the reproductive age and frequent reduction of displays of the disease during postmenopause, and also a decrease of the semiology during pregnancy, allow to formulate some preconditions to hormonal treatment. The effects of sexual steroids on the tissue of the endometrium are presented in table 3. You should not forget the basic property of the cells of the endometrium: they can persist on the background of hyperestrogenia, but after the influence of gestagen the cells die, as though having executed their function.

Effects of sexual steroids on the tissue of the endometrium

According to the data from literature, the only valid indications for hormonal therapy are pelvic pains. Thus, the main principle should be treatment of the patient, instead of the disease. In each case of the use of hormonal preparations, a small number of the patients, who do not react to the therapy, exist. The latter is explained by a distinct difference between the level steroids in the blood serum and the levels of steroid receptors, and also the degree of differentiation of tissue of the

endometrioid foci. In the case of inefficiency of the given method of hormonal influence, there is reason to "switch" to another. In each case it is important to choose the suitable preparation having the minimum number of side-effects, being the least dangerous to the patient and being inexpensive. Therapy of the future is oligonucleotide therapy during which there is an opportunity to switch off separate paracrine factors.

Data from some researches have shown that GRG-analogues, danazol and provera are equally effective. The complexity of choosing a specific hormonal preparation can consist of the fact that the marketing for some preparations is very aggressive. Gradually combined estrogen-gestagen preparations are excluded from the therapy of endometriosis, because high-dosed preparations are necessary, which can cause severe metabolic and system disorders.

Monotherapy with gestagen – norsteroids (norcolut) is quite often cancelled and are not used because of the side androgen effects. Medroxyprogesteron-acetate is widely used; in a dose of 100-200 mg (I injection) can cause amenorrhea for 3 months and more. The basic problem during treatment with Provera, depot-Provera - long restoration of the menstrual cycle. The mechanism of action of gestagen during endometriosis is insufficiently clear, therefore further supervision is required.

Serious side-effects frequently limit the use of danazol: increase in body weight, increase in the atherogenic index, decrease in the sizes of the mammary glands, hypertrophy of the clitoris, emotional lability, acne, congestions, lowering of the voice timbre, increase in appetite, spasms of the skeletal muscles, retaining liquid, headaches, and also atherosclerotic affection of the heart and liver damage.

With the appearance of analogues of GnRG, the spectrum of the therapeutic influence has expanded. Their one-time introduction stimulates the excretion of gonadotropic hormones of the hypophysis with subsequent increase of steroidogenesis in the ovaries. With repeated introduction of the preparations, the reaction to the stimulation gradually decreases, in 3-4 weeks it results in a weak secretion of gonadotropic hormones of the hypophysis with subsequent suppression of the formation of sexual hormones and inhibition of the function of tissue, viability which depends on the influence of sexual hormones.

Zoladex is 100 times more active than native GnRG, decapeptil - 36 times, buserelin - 50 times. These preparations are not prescribed orally, because they are easily broken down to inactivation in the gastrointestinal tract.

The majority of side-effects of agonists are caused by the development of hypoestrogen conditions: congestion, hyperhidrosis, headache, dryness of the vagina, mood changes, depression and so forth. During the duration of the treatment 6-8 months, a decrease in the density of bone tissue by 6-7% is marked. By limited data, it is possible to assume, that insignificant restoration occurs during 12 months

after the treatment is finished. It is known, that the risk of breaks increases with the loss of bone weight of more than 10%.

Taking into account the presence of changes in the hormonal status and disorders of cerebral, vegetative, and emotional mechanisms in patients with endometriosis, it is necessary to individualize the choice of this or that sexual steroid by taking into consideration the following supervisions. Analogues of LH-RH increases the processes of internal synchronization in the CNS, reduces the tone and reactance of the sympathico-adrenal part of the VNS, both for the account of the neuromediator, and due to the hormonal parts. Gestrinon, danoval provide less expressed influences on the VNS, in some patients on the background of treatment some increase in the tone and reactance of the VNS is marked. These preparations provide activating influence on the CNS, reducing the processes of synchronization on the EEG. Therefore, with the inclination for hypotonia and bradycardia, the presence of mixed crisis or vagoinstular, unconscious conditions in a stuffy room or transport in the anamnesis, an increase in the activity of the synchronizing structures of the brain stem, the presence of paroxysmal activity and epileptoid signs or data on convulsive attacks in the past or epilepsy should not be prescribed analogues LH-RH; in these cases it is more preferable to use gestrinon or danoval. On the contrary, in patients with inclination for tachycardia or increase in BP, presence of EEG with attributes of medium-stem dysfunction, the use of analogues of LH-RH is more preferable, than gestrinon or danoval.

The positive about using sinarela is the simplicity of use of endonasal insufflations and the opportunity of fast cancellation, insignificant influence of the preparation on metabolism, absence of virilizing actions, and restoration of the menstrual cycle after finishing the treatment. However, absorption of the preparation varies individually. Besides, infection in the nasopharynx, colds and so forth can cause insignificant absorption of the preparation, as a result it should be cancelled.

For the syndrome of chronic pelvic pains, accompanying varicose veins of the pelvis, there is experience in the use of gestrinon 2,5 mg twice a week for 6 months. In parallel, patients receive disaggregation therapy: teonicol 0,15 x 3\day for 1st week, 2 tablets a day for the 2nd week, 1 tablet a day for the 3rd week, 2 tablets a day for the 4th week. In addition, aspirin at a dose of 250 mg in 48 hours for the 4 weeks is prescribed.

Today, regimes for additional use of replaceable hormone therapy (natural hormones) are being developed in case continuations treatment with agonists is needed. With this purpose, estradiol-valeriat (1 mg a day) or premarin (0,3-0,625 mg a day) for 3 weeks with addition gestagen for the last 10 days (acetomepregenol - 5 mg a day or provera - 5 mg a day) is recommended. This treatment can be prescribed 6-8 weeks after the beginning of treatment with agonists. There are also indications of a positive effect of adding only depot-Provera at 10 mg a day for 7

days after every 4-week course of treatment. This can promote a decrease in the frequency of vegetovascular symptoms and the prophylactics of osteoporosis.

Conservative medicamentous complex also includes preparations of calcium, ascorutin, iodine - containing preparations, hepato-protectors, immunomodulators.

Surgical treatment is presented by electrocoagulation and laser vaporization of heterotopia, cryoendoscopic influence, if indicated – laparotomy in this or that volume.

3.3. Requirements for the results of work.

1. Definition of cyst and tumor of ovary.
2. Cyst of Bartholin gland: clinics, diagnostics, complications, treatment.
3. Tumor-like masses in ovaries: clinics, diagnostics, complications, treatment, tactics of GP.
4. Benign tumors of ovaries (epithelial, tumors of genital cord stroma, lipid-cellular, germ cell tumors): clinics, diagnostics, complications, treatment, tactics of GP.
5. Benign tumors of uterus: clinics, diagnostics, complications, treatment, indications to surgical treatment, tactics of GP.
6. Endometriosis: etiology, pathogenesis, classification, clinics, diagnostics, modern treatment methods, tactics of GP, methods of rehabilitation of reproductive function.

3.4. Control materials for the final stage of the class: tasks, tests, etc.

Tests

1. A 30-year-old patient was hospitalized in the gynecological department with complaints of pain in the lower abdomen, radiating to the lower back, fever up to 37.30C. Objectively: the cervix is cylindrical, the pharynx is closed. The body of the uterus is normal, painless, mobile. The appendages are slightly enlarged, limited in mobility, painful. The vaults are free. Highlights - white. What is the most likely diagnosis?

A. Ovarian cyst.

B. Endometritis.

+ C. Chronic salpingo-oophoritis in the acute stage.

D. Polycystic ovary disease.

E. Pelvioperitonitis.

2. A 17-year-old woman complained of fever up to 38 degrees, pain in the lower abdomen. Complaints appeared 3 days after the next menstruation, which began on time. The abdomen is soft, painful in the lower parts. At bimanual research the uterus without features, appendages are slightly increased, pasty, limited mobility, painful at a palpation, excursions of a neck of uterus are painful. Your diagnosis?

A. Ovarian cystoma.

+ B. Acute salpingo-oophoritis.

C. Ovarian cancer.

D. Endometritis.

E. Endometriosis.

3. A 32-year-old woman complained of pain in the lower abdomen, fever, chills, profuse discharge from the genital tract. A medical abortion was performed 4 days ago. On examination, the abdomen is soft, painful on palpation in the lower parts, the symptoms of peritoneal irritation are negative. The uterus is slightly enlarged, painful on palpation, inhomogeneous consistency. Appendages without features, discharge from the genital tract serous-purulent. Probable diagnosis:

A. Acute salpingo-oophoritis.

+ B. Acute endometritis.

C. Endometriosis.

D. Bacterial vaginosis.

E. Urogenital candidiasis.

4. A 26-year-old woman went to a women's clinic with complaints of mucopurulent discharge from the genital tract, dull intermittent pain in the lower abdomen, accelerated, painful urination. Examination of the cervix in the mirrors reveals hyperemia around the external pharynx, mucosal edema, as well as abundant mucopurulent discharge. Previous diagnosis:

A. Cervical erosion.

B. Colpit.

S. Cervicitis.

+ D. Endocervicitis.

E. Endometritis.

5. A 33-year-old patient was admitted to the gynecological hospital with complaints of sharp pain in the lower abdomen, fever up to 38°C, vaginal discharge of a

purulent nature. There were no births or abortions. Sex life is chaotic. At bimanual research the cervix of a conical form, a throat is closed. The uterus is not enlarged, painful on palpation. The appendages are enlarged, painful on both sides. The vaults of the vagina are painless. Vaginal discharge is abundant, purulent. To establish the diagnosis it is shown:

+ A. Bacteriological examination of secretions from the genital tract.

B. Colposcopy.

C. Probing the uterus.

D. Scraping of the uterine mucosa.

E. Puncture of the abdominal cavity through the posterior vault of the vagina.

6. A 46-year-old patient was taken to the hospital with complaints of intense lower abdominal pain, nausea, vomiting, body temperature of 39.5 ° C. Has been using the IUD for contraception for the past 12 years. Condition of moderate severity, pulse 120 per 1 min, blood pressure 120/80 mm Hg. Art. The tongue is dry, covered with white plaque. The abdomen is swollen, sharply painful in all departments, the symptom of Shchitkin-Blumberg is sharply positive. At bimanual research in a small pelvis the sharply painful, motionless conglomerate in the sizes of 12-14-18 cm is palpated; the posterior vault of the vagina overhangs, sharply painful. Which diagnosis is most likely?

A. Endometritis on the background of the use of the IUD; suppuration of ovarian cysts.

B. Endometritis on the background of IUD use, acute bilateral salpingitis; pelvioperitonitis.

+ C. Endometritis on the background of the use of the IUD; perforation of tuboovarian abscess; diffuse peritonitis.

D. Uterine fibroids with necrosis of one of the nodes; acute purulent salpingitis; diffuse peritonitis.

E. Ovarian cancer stage IV.

7. A 46-year-old patient was taken to the hospital with complaints of intense lower abdominal pain, nausea, vomiting, body temperature of 39.5 ° C. Has been using the IUD for contraception for the past 12 years. Condition of moderate severity, pulse 120 per 1 min, blood pressure 120/80 mm Hg. Art. The tongue is dry, covered with white plaque. The abdomen is swollen, sharply painful in all departments, the symptom of Shchitkin-Blumberg is sharply positive. At bimanual research in a small pelvis the sharply painful, motionless conglomerate in the sizes of 12-14-18

cm is palpated; the posterior vault of the vagina overhangs, sharply painful. Tactics and scope of surgery?

A. Removal of the IUD with the next combined. antibacterial and infusion

transfusion therapy for 7 days. In the absence of effect -

Pfanenshtil's peritoneum, bilateral adnexectomy.

B. Drainage of the pathological formation under the control of transvaginal ultrasound with

followed by antibacterial and infusion therapy.

C. Therapeutic and diagnostic laparoscopy; rehabilitation and drainage of the abdominal cavity.

+ D. Emergency peritoneum; lower median laparotomy; pangysterectomy;

drainage of the abdominal cavity.

E. Emergency laparotomy; peritoneum after Joel-Cohen; supravaginal amputation uterus with fallopian tubes.

8. In a 36-year-old woman at cytological examination of a smear-imprint of the vaginal part of the cervix found atypical cells on the background of colpitis. Colposcopic examination and histological examination of the scraping of the mucous membrane of the uterus and cervical canal did not reveal pathological changes. Define medical tactics:

A. Anti-inflammatory therapy.

B. Does not require additional observation.

C. Repeat fractional diagnostic scraping of the uterine mucosa.

+ D. Repeat cytological examination after anti-inflammatory therapy.

E. Carry out diathermocoagulation of the cervix.

9. In the gynecological department there is a 32-year-old patient with acute bartholinitis. Body temperature 38.2°C, blood leukocytes 10.4 T / l, ESR 24 mm / h. In the area of the large gland the day before - skin redness, a symptom of fluctuation, sharp pain. What is the most correct tactic for a doctor?

A. Antibiotic therapy.

B. Antibiotics + sulfonamides.

C. Opening, drainage of gland abscess

+ D. Disclosure, drainage of gland abscess + antibiotics.

E. Antibiotics + detoxification + biostimulants.

10. A 22-year-old woman was hospitalized in the gynecological department with complaints of lower abdominal pain, fever up to 39.5°C. Objectively: pulse 108 beats / min, blood pressure 120/80 mm Hg. The abdomen is moderately swollen, sharply painful in the hypogastric area. The Schitzkin-Blumberg symptom is positive in the hypogastric region. Vaginal examination: the uterus and appendages are not palpable due to the tension of the anterior abdominal wall, the posterior vault of the vagina overhangs, sharply painful. What is the most likely diagnosis?

A. Acute adnexitis.

B. Ectopic pregnancy.

C. Ovarian apoplexy.

D. Acute endometritis.

+ E. Pelvioperitonitis.

Select from the text laboratory data confirming the diagnosis and prescribe treatment.

Reply:

Urogenital candidiasis in this case is confirmed by the following data:

- complaints of discomfort, itching, itching of the external genitalia.
- examination in mirrors: severe redness and swelling of the mucous membrane of the vagina and cervix. In the posterior vault of the vagina there are secretions of syrupy, milky white. The same discharge is present in the external pharynx of the cervix and urethra.
- microbiological examination: the analysis of the microflora of the vagina, cervical canal and urethra revealed many leukocytes, mixed microflora and a fungus of the genus *Candida*.

Treatment: the main place in the pharmacotherapy of urogenital candidiasis belongs to antifungal drugs, which must be prescribed taking into account the identified type of candidiasis and data on sensitivity to essential drugs. Treatment should be carried out with antifungal drugs of both general and local action (fluconazole, clotrimazole, nystatin)

B. SUMMING UP

Current control: oral examination, testing, assessment of practical skills, solving situational clinical problems, assessment of activity in the classroom.

Criteria for current assessment on the practical lesson:

5 The student is fluent in the material, takes an active part in the discussion and solution of situational clinical problems, confidently demonstrates practical skills during the examination of a pregnant and interpretation of clinical, laboratory and instrumental studies, expresses his opinion on the topic, demonstrates clinical thinking.

4 The student is well versed in the material, participates in the discussion and solution of situational clinical problems, demonstrates practical skills during the examination of a pregnant and interpretation of clinical, laboratory and instrumental studies with some errors, expresses his opinion on the topic, demonstrates clinical thinking.

3 The student isn't well versed in material, insecurely participates in the discussion and solution of a situational clinical problem, demonstrates practical skills during the examination of a pregnant and interpretation of clinical, laboratory and instrumental studies with significant errors.

2 The student isn't versed in material at all, does not participate in the discussion and solution of the situational clinical problem, does not demonstrate practical skills during the examination of a pregnant and the interpretation of clinical, laboratory and instrumental studies.

RECOMMENDED LITERATURE

Basic:

1. Zaporozhan V.M., Mishchenko V.P. Obstetrics and gynaecology in 2 Books : Book 1 : Obstetrics, 2007. – 373 pp.
2. Williams Manual of Obstetrics (24th Ed) F. G. Cunningham, K. J. Leveno, S. L. Bloom, C. Y. Spong, J. S. Dashe, B. L. Hoffman, B. M. Casey, J. S. Sheffield, McGraw-Hill Education/Medical. – 2014. – 1377 pp.
3. Textbook of Gynecology (6th Ed) Dutta DC., Hiralal Konar (Ed.). – JAYPEE BROTHERS MEDICAL PUBLISHERS (P) LTD, 2013. – 702 pp.
4. Llewellyn-Jones Fundamentals of Obstetrics and Gynaecology (10th Ed). Jeremy Oats, Suzanne Abraham. Elsevier. 2016. – 384 pp.
5. The FIGO Textbook of Pregnancy Hypertension. An evidence-based guide to monitoring, prevention and management. L. A. Magee, P. Dadelszen, W. Stones, M. Mathai (Eds), The Global Library of Women's Medicine. – 2016. – 456 pp.

