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



THE METHODICAL RECOMMENDATIONS FOR PRACTICAL CLASS

Iternational Faculty, Course VI
Discipline "Obstetrics and Gynecology"

Practical lesson №27. Topic: Precancerous diseases of female genitalia. Malignant tumors of the genitalia.

Approved:

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

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Head of the Department, Doctor of Medicine, Professor ______(I.Z. Gladchuk)

Developer:

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Practical lesson № 27.

Precancerous diseases of the female genitalia. Malignant tumors of the genitalia.

Learning objective Among the persistent problems are questions of practical gynecology careful selection of patients with an increased risk of cervical cancer and monitoring of their condition as cervical cancer is the second place in the structure of cancer incidence in women, it also accounts for 60% of cancer incidence among sex organs.

Basic concepts:

- 1. Background and precancerous diseases of cervix: etiology, classification, clinics, diagnostics, treatment.
- 2. Hyperplastic processes of endometrium: etiology, pathogenesis, classification, diagnostics, treatment methods, tactics of GP.
- 3. Prophylaxis of background and precancerous diseases of female genitalia

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.

In the structure of oncologic sickness rate, tumours of the female genitals make up 20-30%. The data, published by the Committee on cancer of the International

Federation of Obstetrians-Gynecologists, confirms that among the revealed patients the 1 stage was determined only in 20%, the other 80% of patients consulted the doctor with more widespread stages of the process, when radical treatment is fraught with many relapses and metastases or is in general impracticable. For the initial stages of cancer treatment results in recovery in 98-100% of the cases, in a part of the patients the generative function can be kept. Therefore, prophylactics of malignant tumours are a major actual problem of the public health services. In other words – an important contribution to solving the problem of malignant tumours of the genitals is made by active revealing and treatment of patients not only with early stages of malignant tumours, but also with benign tumours, and also with pretumorous diseases.

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:

Classify and analyze clinical picture of precancerous and malignant diseases of female genital system.

- 2. Make plan of examination using modern methods of diagnostics, analyze data of laboratory and instrumental tests in precancerous and malignant diseases of female genitals and state preliminary diagnosis;
- 3. Conduct differential diagnostics of precancerous and malignant diseases of female genital system;

- 4. Determine tactics of patient management(principles of operative interventions and conservative treatment, rehabilitation measures) in precancerous and malignant diseases of female genital system;
- 5. Conduct prophylaxis of precancerous and malignant diseases of female genital system;
- 6. Perform necessary medical manipulations (inspection by speculums)

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

Questions:

- 1. In the absence of effect of conservative treatment of endometrial hyperplasia polypous form shown application:
- A. hormone
- B. Phytotherapy
- C. Physiotherapy
- + D. Surgical treatment
- E. antispasmodics
- 2. Endometrial hyperplasia was observed in:
- A. polycystic ovaries
- B. ovary C. Teratomas Hranulezokletochnoy ovarian tumor
- D. uterine fibroids
- + E. cervical erosion
- 3. The clinical picture of endometrial hyperplasia:
- A. oligomenorrhea
- + B. Dysfunctional uterine bleeding
- C. Pain
- D. leukocyte shift to the left
- E. Increase ESR
- 4. Endometrial polyposis often occurs:

A. In menopause B. After birth + C. In menopause D. During treatment with progesterone E. After discontinuation of oral contraceptives 5. Do adenomatous polyps belong to precancerous endometrial? + A. So B. No C. Not always D. Only in postmenopausal women only 30 years 6. Wich factors for endometrial cancer does not apply: +A. Obesity B. Anovulatory menstrual cycles C. Ovarian Tumor D. Endogenous estrogens E. High levels of progesterone 7. Adenomatosis - is: + A. Atypical endometrial hyperplasia B. Endometrial cancer C. Internal endometriosis D. True cervical erosion E. endometrial polyposis 8. Definition of cross cervical canal, uterine cavity length, presence of tumor in it, use: A. Cervical Biopsy B. colposcopy C. Laparoscopy + D. Sounding the uterus E. Kuldoskopiyu

- 9. Contraindications to diagnostic curettage:
- + A. Acute and subacute inflammatory diseases of genitals
- B. Endometrial Polyps
- C. Dysfunctional uterine bleeding
- D. cervical polyp
- E. endometrial hyperplasia
- 10. Dysfunctional uterine bleeding in women of childbearing age treatment should begin with:
- A. Reduces B. funds hysterectomy
- C. hormonal
- + D. Therapeutic and diagnostic curettage endometrial
- E. antibiotic therapy

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.

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- 2. Endometrial hyperplasia was observed in:
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- D. uterine fibroids
- + E. cervical erosion
- 3. The clinical picture of endometrial hyperplasia:
- A. oligomenorrhea
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- C. Pain
- D. leukocyte shift to the left
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- 4. Endometrial polyposis often occurs:
- A. In menopause
- B. After birth
- + C. In menopause
- D. During treatment with progesterone
- E. After discontinuation of oral contraceptives
- 5. Do adenomatous polyps belong to precancerous endometrial?
- + A. So

- B. No
- C. Not always
- D. Only in postmenopausal women only 30 years
- 6. Wich factors for endometrial cancer does not apply:
- +A. Obesity
- B. Anovulatory menstrual cycles
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- D. Endogenous estrogens
- E. High levels of progesterone
- 7. Adenomatosis is:
- + A. Atypical endometrial hyperplasia
- B. Endometrial cancer
- C. Internal endometriosis
- D. True cervical erosion
- E. endometrial polyposis
- 8. Definition of cross cervical canal, uterine cavity length, presence of tumor in it, use:
- A. Cervical Biopsy
- B. colposcopy
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- 9. Contraindications to diagnostic curettage:
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- B. Endometrial Polyps
- C. Dysfunctional uterine bleeding
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3.2. Educational materials, recommendations (instructions) for performing tasks

Background and precancerous diseases of external genitalia.

Tumors of the external genitalia - it neoplasms (growths of tissue lesions) in the vulva: vestibule, clitoris, large and small labia, large glands vestibule (Bartholin).

Background and precancerous diseases of cervix: classification.

- I. Benign background processes:
- Dishormonal processes:
- 1. Ectopic columnar epithelium (endocervicoses, glandular erosion, pseudo): simple, proliferate epidermical
- 2. polyps (benign growths polip-like): simple; proliferating; epidermical.
- 3. Benign Area of transformation: the unfinished and finished.
- 4. Papillomavirus.
- 5. Endometriosis cervix.
- Post-traumatic processes:
- 1. Gaps of the cervix.
- 2. ectropion.
- 3. scarring of the cervix.
- 4. cervical-vaginal fistulas.
- Inflammation:
- 1. True erosion.
- 2. Cervicitis (exogenous and endocervicitis): acute and chronic.

II. Precancerous conditions:

- Dysplasia.
- 1. Simple leukoplakia.
- 2. Fields of dysplasia: multilayered squamous epithelium; metaplastacy-changed prismatic epithelium.
- 3. Papillary area of transformation: multilayered squamous epithelium; metaplasmatic prismatic epithelium.
- 4. Precancerous transformation zone
- 5. Warts
- 6. Precancerous polyps
- 1.leukoplakia with atypia cells
- 2.erythroplakia
- 3. adenomatosis
- III. Cervical cancer
- Pre-clinical forms:
- 1. proliferating leukoplakia.
- 2. Fields atypical epithelium.
- 3. Papillary transformation zone.
- 4. atypical transformation zone.
- 5. Zone atypical vascularization.
- 6. Cancer in situ (intraepithelial, stage 0).
- 7. Microcarcinomas (stage I A).

Clinical forms of cancer: exo, endophytic mixed.

Hyperplastic processes of endometrium: etiology, pathogenesis, classification, modern methods of diagnostics, management tactics, treatment principles.

Endometrial hyperplasia - a benign pathology of the endometrium, which develops in the absolute or relative hyperestrogenism.

Etiology

Risk factors for endometrial hyperplasia include:

- menstrual disorders by type of anovulation;
- a history of infertility;
- obesity;
- diabetes;
- insulin resistance;
- hereditary tendency (tumors of the ovaries, uterus, breast, colon).

Pathogenesis. The basis of the formation of endometrial hyperplasia are ovulation disorders that occur on the type of persistence or follicular atresia. The lack of ovulation is accompanied by a loss of luteal phase MC. Reduced levels of progesterone and as a result, no cyclic secretory transformation in the endometrium results in the fact that as a result of a significant increase in the level of estrogen and / or with the prolonged influence of the proliferative changes in the endometrium.

Morphologically hyperplastic processes in the endometrium aggravation and dive into the underlying layers of epithelial tissue. One morphological criteria for different forms of endometrial hyperplasia is the nature of the iron.

Simple non-atypic hyperplasia - an increase in the number of both glandular and stromal elements, with a slight predominance of the first - is characterized by the following features:

- Increase in the volume of the endometrium;
- structural differences from normal endometrium active glands and stroma, glands are located unevenly, some cystic dilated;
- a balance between the glands and stroma proliferation;
- uniform distribution of blood vessels in the stroma:
- lack of atypia of the nuclei.

Integrated neatipichnaya hyperplasia - the close location of the glands distributed or focal character. She characterized by:

- more pronounced proliferation of glands;
- cancer structurally irregular shape;
- imbalance between proliferation of glands and stroma;
- more pronounced multicore epithelium;
- lack of atypia of the nuclei.

Simple atypical endometrial hyperplasia - the presence of atypia cells glands - manifested loss of polarity and location of unusual configuration of nuclei, often acquiring a rounded shape. The nuclei of cells in this type of hyperplasia - polymorphic, and they often allocated large nucleoli. The characteristic features of cell atypia:

- Cell dispolyarnost;
- wrong stratification cores;
- Anisocytosis;
- giperhromatizm cores;
- an increase of nuclei;
- Expansion of vacuoles;
- eosinophilia of the cytoplasm.

Complex atypical endometrial hyperplasia is characterized by the proliferation of epithelial component expressed as in the complex neatipichnoy hyperplasia, which is combined with the tissue and cellular atypia without invasion of the basement membrane of glandular structures. Iron loses usual for normal endometrium regularly spaced, they are very diverse in size and shape. The epithelium that lines gland, consists of large cells with polymorphic, rounded or elongated nuclei with impaired and multi-polarity of their location.

Classification

- I. Simple atypical endometrial hyperplasia
- II. Complex atypical endometrial hyperplasia
- III. Simple atypical endometrial hyperplasia
- IV. Complex atypical endometrial hyperplasia
- V. Adenocarcinoma

Diagnostics

Physical methods of research

- Poll characteristics of menstrual dysfunction; During menopause; of history heredity (the presence of tumors in the family), infertility.
- General inspection the presence of anemia, signs of obesity.
- Deep palpation of the abdomen pain.
- Examination of the external genitalia.

- Inspection of the mirrors.
- bimanual gynecological examination mobility, pain, size, texture of the uterus.

Laboratory methods

- determination of blood group and Rh factor;
- CBC signs of anemia;
- general urine analysis;
- determine the level of sugar in the blood the presence of diabetes;
- biochemical blood;
- bacterioscopic analysis of discharge;
- hormone kolpotsitologiya;
- cytology aspirates and swabs from the uterine cavity (can be used to monitor the ongoing conservative therapy).

Instrumental methods

- 1. US (transabdominal, transvaginal preferable, doppler)
- 2. Fractional diagnostic curettage.

In the presence of indications:

- Hysteroscopy (visualization of pathological changes of the endometrium, their localization, the ability to perform intrauterine surgery using electricity, cryo or laser surgery);
- endometrial biopsy;
- X-ray examination (hysterosalpingography and bikontrastnaya gynecography now rarely used).

Treatment

Pharmacotherapy

Treatment begins with a separate treatment and diagnostic curettage walls of the uterus and cervix.

The mainstay of treatment of endometrial hyperplasia is a hormone therapy.

Hormone therapy is conducted in conjunction with other methods of pathogenetic therapy

Surgery

Indications for surgical treatment of patients with endometrial hyperplasia

In reproductive age:

- complex atypical hyperplasia in the absence of effect of conservative treatment after 3 months;
- simple and complex atypical hyperplasia neatipichnaya in the absence of effect of conservative treatment at 6 months.

When neatipichnyh forms of endometrial hyperplasia, especially in women of reproductive age, it is advisable to use hysteroscopic resection or ablation of the endometrium, while atypical - preference is given to a hysterectomy.

At menopause:

- complex atypical hyperplasia at diagnosis;
- simple and complex atypical hyperplasia neatipichnaya in the absence of effect of conservative treatment after 3 months.

Prevention

To prevent the development of cervical pathology are necessary:

- Prevention, timely diagnosis and treatment of inflammatory processes of genitals;
- The timely correction of hormonal and immune homeostasis;
- Promotion of a culture of sexual relations;
- Prevention of abortions (rational contraception);
- To give up smoking.

Women need to know that the symptoms of cervical disease are scarce and inexpressive. They can be found in a timely manner to resolve the issue of the necessary treatment only for the regular observation of the gynecologist!

Use mirrors Cusco or spoon-shaped mirror with a lift. Before the introduction of the mirror in the vagina dilute labia I and II of the fingers of his left hand. Wing mirror cloistered administered to the vaginal vault, and then open it to expose the cervix.

Spoon-shaped mirror is introduced on the back wall of the vagina, pushing the crotch. Introduced hoist lift the front wall of the vagina, examine the cervix and vagina vaults. At the same time pay attention to the color of the mucous membrane of the vagina, on the size, shape, position and state of the cervix, the shape and condition of the external os, on discharge from the cervical canal.

When viewed with the help of mirrors estimate:

- The capacity of the vagina;

- The state of the vaginal mucosa, the severity of folding, color, inflammatory changes, the nature of discharge, the presence of warts, partitions;
- Cervical shape (conical nulliparous, cylindrical in nulliparous women);
- Scar cervical strain;
- The state of the external os (round shape nulliparous, slit have given birth);
- The nature of discharge from the cervical canal;
- The state of the mucous membrane of the vaginal part of the cervix (the epithelium unchanged, pseudo, eroded ectropion, polyp, exophytic growths).

Bimanual examination.

In the vagina injected II and III fingers of his right hand, give birth to them in the posterior fornix, and the left hand palpate the abdominal wall.

Palpating the cervix, determine its position, shape, size, outer mouth and permeability, the permeability of the cervical canal, palpating the uterus - its position, size, shape, consistency, mobility, tenderness.

Move the fingers in the lateral vaginal fornix, palpate the uterus, determine their shape, texture, size, tenderness, mobility. Unchanged tubes and ovaries are not determined by palpation.

Examine the condition of the vaginal vault (presence of infiltrations, their consistency, tenderness, location in relation to the pelvic bones).

Tumor Spread

Following tumorigenesis, the pattern o local growth may be

exophytic i a cancer arises rom the ectocervix, or may be endophytic i it arises rom the endocervical canal (Fig. 30-3). Lesions

lower in the canal and on the ectocervix are more likely to be

clinically visible during physical examination. Alternatively growth may be in ltrative, and in these cases, ulcerated lesions are common i necrosis accompanies this growth. As primary lesions enlarge and lymphatic involvement progresses, local invasion increases and will eventually become extensive.

Lymphatic Spread

Lymph Node Groups. T e pattern o tumor spread typicall follows cervical lymphatic drainage. T us, amiliarity with this drainage aids understanding the surgical steps o radical hysterectomy per ormed or this cancer (Section 46-1, p. 1134).

Development of a cancer

The most common ovarian tumor in a woman younger than 30 years is a benign cystic teratoma (dermoid cyst). The best treatment of a dermoid in a young woman is ovarian cystectomy.

- » The most common ovarian tumor in a woman older than 30 years is epithelial in origin, most commonly serous cystadenoma.
- » An ovarian mass larger than 5 cm in a postmenopausal woman most likely represents an ovarian tumor and should generally be removed. An ovarian mass that is larger than 2 cm in a prepubertal girl likewise should be investigated and usually requires removal.
- » During the reproductive years, functional ovarian cysts are common and are usually smaller than 5 cm in diameter. Any ovarian cyst larger than 10 cm in a reproductive-aged woman is probably a neoplasm and should be excised.
- » The tumor marker CA-125 is elevated in most epithelial ovarian cancers. It is more specific in postmenopausal women.
- » Mucinous tumors of the ovary can grow to be very large. If they rupture intraabdominally, they may cause pseudomyxomaperitonei, which can lead to repeated bouts of bowel obstruction.
- » Ascites is a common sign of ovarian malignancy.
- » Ovarian cancer staging consists of total hysterectomy, bilateral salpingooophorectomy, omentectomy, peritoneal biopsies, peritoneal washings or sampling of ascitic fluid, and lymphadenectomy.
- » After maximum debulking of the epithelial cancer, combination chemotherapy with a platinum agent and a taxane is used.

3.3. Requirements for the results of work.

- 1. Classify and analyze clinical picture of precancerous and malignant diseases of female genital system.
- 2. Make plan of examination using modern methods of diagnostics, analyze data of laboratory and instrumental tests in precancerous and malignant diseases of female genitals and state preliminary diagnosis;

- 3. Conduct differential diagnostics of precancerous and malignant diseases of female genital system;
- 4. Determine tactics of patient management(principles of operative interventions and conservative treatment, rehabilitation measures) in precancerous and malignant diseases of female genital system;
- 5. Conduct prophylaxis of precancerous and malignant diseases of female genital system;
- 6. Perform necessary medical manipulations.
- 3.4. Control materials for the final stage of the class: tasks, tests, etc.

Tests

- 1. In the absence of effect of conservative treatment of endometrial hyperplasia polypous form shown application:
- A. hormone
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- C. Physiotherapy
- + D. Surgical treatment
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- 2. Endometrial hyperplasia was observed in:
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- 4. Endometrial polyposis often occurs:
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 - 9. Contraindications to diagnostic curettage:

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- E. endometrial hyperplasia
- 10. Dysfunctional uterine bleeding in women of childbearing age treatment should begin with:
- A. Reduces B. funds hysterectomy
- C. hormonal
- + D. Therapeutic and diagnostic curettage endometrial
- E. antibiotic therapy

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. Oxford Handbook of Obstetrics and Gynaecology by S. Collins , S. Arulkumaran , K. Hayes , S. Jackson , L. Impey, Oxford University Press, 3rd Edition, 2019
- 2. Handbook of Gynecology Shoupe, MD, MBA, Donna (Ed.), Springer, 2017
- 3. Oxford Handbook of Obstetrics and Gynaecology by S. Collins , S. Arulkumaran , K. Hayes , S. Jackson , L. Impey, Oxford University Press, 3rd Edition, 2019
- 4. Gunner Goggles Obstetrics and Gynecology, Edition 1, By Hao-Hua Wu, Leo Wang, 06 Oct 2018
- 5. Beckmann and Ling's Obstetrics and Gynecology, Eighth, North American Edition, Dr.Robert Casanova, May 3, 2018 Beckmann and Ling's Obstetrics and Gynecology, Eighth, North American Edition, Dr.Robert Casanova, May 3, 2018
- 6. The Linde's operative gynecology John A.Rock, 2020
- 7. Essential Obstetrics and Gynaecology (6th Edition) E. Malcolm Symonds, Ian M. Symonds , 2018