

MINISTRY OF HEALTH OF UKRAINE

ODESA NATIONAL MEDICAL UNIVERSITY

International Faculty
Department of obstetrics and gynecology



APPROVED

Vice-rector for scientific
and pedagogical work

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METHODOLOGICAL DEVELOPMENT

**for the practical lessons
in elective discipline**

International Faculty, VI year

Elective discipline

"OBSTETRICS AND GYNAECOLOGY IN THE PRACTICE OF A FAMILY DOCTOR"

Practical lesson No2. Topic: "Oncoprophylaxis of gynecological diseases"

Approved:

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

Protocol No. 1 of August 29, 2024

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Developer

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Practical lesson No. 2

Topic 2. "Oncoprophylaxis of gynecological diseases"

Purpose: To teach how to conduct a screening examination of women who turn to a specialist for the purpose of early diagnosis of diseases of the female reproductive system. Assess the patient's condition, draw up an examination plan using modern diagnostic methods, analyze laboratory and instrumental examination data for benign and precancerous diseases of the female reproductive system and determine a preliminary diagnosis; determine management tactics (principles of primary prevention, monitoring, and surgical interventions and conservative treatment, as well as rehabilitation measures) in the treatment of precancerous and malignant diseases of the female reproductive system;

Basic concepts: Active identification and treatment of patients not only with early stages of malignant tumors, but also with pre-cancerous and benign tumors has an important contribution to solving the problem of prevention of the spread of malignant tumors of the genital organs.

Precancerous diseases of external genital organs. Precancerous diseases of the cervix: classification. Hyperplastic processes of the endometrium: etiology, pathogenesis, classification, modern diagnostic methods, management tactics and principles of treatment. Prevention of precancerous diseases of the female genital organs.

Equipment: Professional algorithms, structural and logical schemes, tables, models, video materials, results of laboratory and instrumental studies, situational problems, patients, case histories.

I. Organizational measures (greetings, verification of those present, announcement of the topic, purpose of the lesson, motivation of higher education seekers to study the topic).

At the current stage, in the structure of oncological morbidity, tumors of the female genital organs make up 20-30%. On today in Ukraine for cervical cancer (CRC) up to 2.5 thousand patients die, of which 700 are women reproductive age. About 500,000 are diagnosed in the world every year new cases of RSM. Given that the development of cancer is not rapid process, the doctor has enough time to diagnose and treat the initial forms of the lesion.

The main goal insists on conducting preventive examinations among patients with precancerous diseases and in the early stages, it is known that the effectiveness of treatment increases significantly at this stage. With cancer of the cervix of the uterus in the initial and early stages, treatment leads to recovery in 98-100% of cases, and in some patients it allows to preserve the generative function. A special place is

needed for the cohort of women infected with the human papillomavirus type 16-18, which is a predictor of the development of cervical cancer. Conducting primary oncoprophylaxis of the cervix with the use of antiviral vaccines "Cervarix" and "Gardasil".

In other words, active detection and treatment of patients not only with early stages of malignant tumors, but also with benign tumors, as well as with pre-tumor diseases, makes an important contribution to solving the problem of preventing the spread of malignant tumors of the genital organs.

2. Control of the reference level of knowledge (written work, written test, online test, face-to-face survey, etc.).

• *Knowledge requirements:*

- communication and clinical patient examination skills;
- the ability to determine the list of necessary clinical and laboratory and instrumental studies and evaluate their results;
- the ability to establish a preliminary and clinical diagnosis of the disease;
- the ability to determine the necessary mode of work and rest in the treatment and prevention of diseases;
- the ability to determine the nature of nutrition in the treatment and prevention of diseases;
- the ability to determine the principles and nature of treatment and prevention of diseases;
- the ability to diagnose emergency conditions;
- the ability to determine tactics and provide emergency medical assistance;
- the ability to perform medical manipulations.

• *List of didactic units:*

- Counseling on precancerous diseases of the cervix, external genital organs, and counseling of patients with AMC of various ages .
- For a general overview . Examination methods using gynecological examination: in mirrors, bimanual examination, rectovaginal examination . Assessment of the patient's condition.
- A necessary examination, which is carried out in a planned manner before making a decision on the use of an additional method of examination and treatment
- ***Questions (test tasks, tasks, clinical situations) to check basic knowledge on the topic of the seminar:***

Question:

- Classification of precancerous diseases of the cervix.
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- Prevention of precancerous diseases of the female genital organs
 - Etiopathogenetic factors causing the development of cervical pathology. Papillomavirus infection.
 - Precancerous diseases of the cervix: etiology, clinic, diagnosis, treatment
 - Methods of diagnosis of precancerous diseases of the cervix.
 - Treatment tactics for precancerous diseases of the cervix, indications for radical treatment methods.
 - . Vaccination against HPV infection
 - The concept of "hyperplastic processes of the endometrium" as a factor in the development of AMC in different age periods.
 - WHO histological classification of hyperplastic endometrial processes.
- Additional methods of diagnosis of endometrial hyperplastic processes

Typical situational tasks:

1. A 32-year-old patient complains of pulling pain in the lower abdomen, smearing brown discharge before menstruation and abundant discharge during the cycle. During bimanual examination, the uterus is slightly enlarged, more in the isthmus region, painful during excursion, round shape. Appendages on both sides without features. Preliminary diagnosis - internal endometriosis. During ultrasound, there is an echo-positive structure 1.5x1.0 in the cavity. The most informative for diagnosis and treatment tactics in this case.

1.D-z Endometrial polyp. AMK

Examination algorithm: Hysteroscopy, polypectomy. According to the results of the histological examination, treatment measures are prescribed.

2. A 45-year-old patient complains of watery vaginal discharge and contact bleeding. The last oncological examination was 5 years ago, erosion of the cervix was detected, and treatment with fat tampons was carried out. In the mirrors: the cervix is hypertrophied, growths are noted on both lips of the cervix, which bleed when touched. Vaginal: the body of the uterus is slightly enlarged, mobile, painless, appendages are not defined. Vaults of the vagina, parameters - free. Which of the methods is the most valuable for confirming the diagnosis?

D-z: Cervical cancer? Colposcopy with targeted biopsy. Smear for cytomorphological examination.

Depending on the results of the histological examination, the decision on the extent of surgical intervention is made.

3. A 48-year-old patient came to the gynecological department with complaints of bleeding from the genital tract. From the anamnesis: menstruation since the age of 14, established immediately (4-5 days after 28 days), moderate, painless. For the last 2 years, the intervals between periods have been 2-3 months. 15 days ago, after a 2-month absence of menstruation, uterine bleeding began, which continues to this day.

Upon admission: skin and visible mucus pale, pulse 76 beats. in min., blood pressure - 110/80 mm Hg. st., hemoglobin - 100g/l.

The abdomen is soft, painless on palpation. No pathology was detected from the internal genital organs.

Make a diagnosis.

What should be the doctor's tactics?

Answer: AMK. A hysteroscopy or medical and diagnostic curettage of the uterine mucosa should be performed followed by a histological examination of the endometrium.

Typical test tasks:

1. A 24-year-old patient turned to a gynecologist with complaints about the appearance of growths in the area of the genitals. After examining the patient, the doctor found on the labia majora and minora papilla-like growths, reminiscent of cauliflower, of a soft consistency, painless, non-erosive. The patient was referred to a dermatologist for consultation. What is the most likely diagnosis?

- A. Acuminate condylomas
- B. Wide condylomas
- C. Vegetative pemphigus
- D. Granulomatous candidiasis
- E. Papillomatosis

step 2017

2. After 10 years of menopause, a 58-year-old patient started profuse uterine bleeding. In the course of bimanual examination and examination with the help of mirrors, apart from abundant bloody discharge, no other pathology was detected. What disease can be assumed?

- A. Cancer of the uterine body
- B. Schroeder's hemorrhagic metropathy
- C. Incomplete abortion
- D. Myoma of the uterus
- E. Violation of the menstrual cycle of a climacteric nature

3. In a 36-year-old patient, a neck deformity was detected during a preventive examination in mirrors

uterus with old postpartum tears. During colposcopic examination on the back lip revealed fields of dysplasia. What should be done to clarify the diagnosis?

- A. Biopsy of the cervix
 - B. Diagnostic scraping
 - C. Cystoscopy, irigoscopy
 - D. Bacteriological examination of secretions
 - E. Ultrasound of the pelvic organs
4. A 54-year-old woman came to the gynecologist with complaints of vaginal bleeding for 1 month. The last menstruation was 5 years ago. No pathology was found during the gynecological examination.
- Your actions:
- A. Fractional diagnostic scraping of the walls of the uterine cavity
 - B. Colposcopy
 - C. Ultrasound
 - D. Take a swab for cytological examination
 - E. Prescribe symptomatic therapy

Correct answers: 1 - A; 2 – E; 3 – A ; 4 – A;

3. Formation of professional abilities and skills (mastery of skills, conducting curation, determining the treatment scheme, conducting laboratory research, etc.):

•Content of tasks (tasks, clinical situations, etc.):

Interactive task:

Divide the students into 3 subgroups. We work in women's consultation offices with pregnant patients at different stages of pregnancy, we give tasks:

Tasks for subgroups

And a subgroup. Collect the patient's obstetric and gynecological and somatic anamnesis, determine the list of necessary clinical, laboratory and instrumental studies, establish a preliminary and clinical diagnosis of the disease

II subgroup. Draw up a treatment plan for the woman and determine management tactics.

III subgroup. Evaluate the correctness of the answers of subgroups I and II, if necessary, introduce corrections.

Unusual situational tasks:

1. A 35-year-old patient applied to a gynecological hospital with complaints of periodic pains in the lower abdomen, which increase during menstruation, are dark brown smearing discharge from the genital tract. During bimanual examination: the body of the uterus is several enlarged, appendages are not identified, during examination of the cervix in mirrors, they are found blue "eyes".

1) What is the most likely diagnosis?

External endometriosis of the cervix

2) Examination algorithm: smear for cytomorphology, colposcopy is common. Cervical biopsy is targeted.

Treatment tactics depending on the results of histological examination.

If endometriosis is confirmed, excisional therapy should be carried out (excision of the area with endometriosis foci).

Non-typical test tasks:

1 . A 48-year-old patient complains of contact bleeding. When examined in the mirrors, it was found hypertrophy of the cervix. The latter has the form; of cauliflower; easily injured, dense. At bimanual examination: the vault is shortened, the body of the uterus is immobile. Which is the most favorable diagnosis?

- A. Cervical cancer
- B. Uterine fibromyoma
- C. Endometriosis
- D. Cervical pregnancy
- E. Papillomatosis of the cervix

3. A 54-year-old woman complained of bleeding from the genital tract after 2 years of amenorrhea.

During the ultrasound and bimanual examination, no genital pathology was detected. What are the doctor's tactics?

- A. Fractional scraping of the cervix and uterine cavity
- B. Hemostatic drugs
- C. Reducing drugs
- D. Estrogenic hemostasis
- E. Hysterectomy

4. A 62-year-old patient came to the women's consultation with complaints about the presence of watery secretions, sometimes with impurities of blood from the vagina. Menopause 7 years. Periodically, the patient appears insignificant pain in the lower abdomen, swelling of the intestine. The uterus is enlarged up to 10 weeks of pregnancy, limited mobility, sensitive. Add-ons are not defined. What research should be done carry out to clarify the diagnosis?

- A. Separate diagnostic scraping of the cervical canal and uterine cavity
- B. Ultrasound
- C. Contrast radiography
- D. Cytological examination of smears
- E. Puncture of the posterior vault

Correct answers: 1 - D , 2 - A, 3 - A, 4 - A,

Recommendations (instructions) for the performance of tasks (professional algorithms, orienting maps for the formation of practical skills and abilities, etc.):

Precancerous diseases Precancerous diseases of the cervix	Dysplasia of the cervical epithelium - focal or single or multiple pathological processes in which hyperplasia, proliferation, violation of differentiation, maturation and rejection of epithelial cells that do not go beyond the basement membrane are noted.
Ectopia of the cervix	displacement of the cylindrical epithelium on the displacement of the cylindrical epithelium on the vaginal portion of the cervix.
Polyp of the cervical canal	this is a focal proliferation of the connective tissue of the endocervix, covered with a cylindrical epithelium and protruding into the lumen of the cervical canal or beyond it and are connective tissue growths covered with epithelium. Cervical papilloma is a form of lesion of the cervix covered with epithelium.
Cervical papilloma	the form of the lesion of the cervix and is characterized by focal growths of the stroma and multilayered epithelium with keratinization. In their
	viral infections and chlamydia play a certain role in its occurrence
Candyloma of the cervix	abnormal growths of multi-layered flat epithelium according to the type of acanthosis (immersion of keratinized epithelial islands in the underlying tissue between the connective tissue papillae) with elongated papillae.
Erosive ectropion	inversion of the mucous membrane of the cervix, characterized by the presence of pseudoerosion and cicatricial deformation of the cervix

Dysplasia of the epithelium of the cervix (cervical intraepithelial neoplasia, CIN, cervical intraepithelial neoplasia, CIN)	characterized by pronounced proliferation of atypical epithelium of the cervix with a violation of its stratification without involvement of the stroma and surface epithelium in the process, a pathological process of keratinization of the surface layers of a multilayered fold
Leukoplakia	The basis of the development of leukoplakia are histological changes: hyperkeratosis, parakeratosis, acanthosis. who the epithelium of the cervix
Endometrial hyperplasia	non-physiological proliferation of the endometrium, which is accompanied by a structural rearrangement of its iron and, to a lesser extent, stromal components
Atypical hyperplasia of the endometrium	signs of cytological atypia: it has signs of cellular and nuclear polymorphism along with disorganization of the epithelium of the endometrial glands. A benign neoplasm that rises above the surface of the endometrium to form a nodular form consisting of endometrial glands and stroma.

There is an effective prevention of RSHM timely detection and treatment of background and precancerous diseases, in particular dysplasia (cervical intraepithelial neoplasia (CIN) or squamous intraepithelial lesion of the cervix. For the last 10 years, the number of cervical dysplasias in young women under the age of 30 has increased, the number of patients with initial forms of cervical cancer at the age of 33-43 has increased, mortality from cervical cancer has increased in the age range of 25-49 years.

The human papilloma virus (HPV) is a risk factor for the development of cervical cancer.

The most carcinogenic strains are HPV types 16 and 18, which cause 73.5% of cases of RSHM. Persisting in cells for years epithelium of the cervix, HPV leads to mutations, development dysplasia and malignancy.

Diseases of the cervix are classified into background, precancerous conditions (dysplasia), preinvasive and invasive cervical cancer.

Risk factors for the development of cervical dysplasia :

- Early onset of sexual life (14-17 years), when the epithelium of the cervix is immature and easily exposed to oncogenic influences.
- Frequent change of sexual partners.
- Sexually transmitted diseases. Bacterial infections (conditionally pathogenic and pathogenic microflora). Viral infections (HPV, HSV) c associations with CMV, chlamydia as a factor in STDs (papillomavirus, trichomoniasis, chlamydia, ureaplasmosis, gonorrhea, etc.).

- Smoking..

Traumatic damage to the cervix (after childbirth, abortions, surgical interventions on the cervix)

- Genetic factor
- Hormonal disorders

Comprehensive examination of patients with pathology of the cervix

Diagnostic methods	
Basic examination methods	Additional examination methods (if indicated)
Collection of anamnestic data	Bacterioscopic and bacteriological
Examination of the cervix mirrors	Virological
Cytological research	Hormonal
Colposcopy	Colpocytological
Bimanual vaginal examination	Sonography of the pelvic organs
Morphological study targeted biopsy material	

Examination of the cervix with abnormal cellular morphology of the Papanicolaou smear includes the following methods:

- simple and extended colposcopy;
- biopsy of the cervix;
- scraping of the mucous membrane of the cervical canal (endocervical curettage);
- targeted and cone-shaped biopsy of the cervix

A simple colposcopy is an examination of the cervix after removal of its surface without the use of medication.

Extended colposcopy is performed after applying 3% acetic acid solution or 2% Lugol's solution to the pelvic part of the cervix. After treatment with 3% solution of acetic acid, the unchanged epithelium changes to a pale color, when applying 2% Lugol's solution (Schiller's test), the surface of the vaginal part of the cervix is uniformly colored in a dark brown color

Targeted biopsy: Material is collected under the control of colposcopy

Ovarian tumors take the second place among neoplasms of female genital organs - 8-11% Benign - 85%, of which cysts - 35% Ovarian cancer takes the 3rd place among gynecological tumors

Ovarian tumors take the second place Among neoplasms of the female genital organs – 8-11% . Benign - 85%, of which cysts - 35%. Ovarian cancer ranks 3rd among gynecological tumors after cancer of the body and cervix, and 7th in the structure of the overall oncological incidence after cancer of the body and cervix, and 7th in the structure of the overall oncological incidence.

Complaints (discomfort, pain in the lower abdomen and lower back, menstrual disorders and

reproductive functions, etc.) History of illness and life (transferred

children's infections, frequent tonsillitis, chronic tonsillitis, menstrual, generative,

sexual functions, heredity, etc.) General physical examination

Gynecological recto-vaginal examination, by which it is established

presence and localization of the pathological process, shape, size of the uterus and

appendages, their consistency, mobility, tenderness during palpation, anatomical

topographic relationships of pelvic organs, etc

imaging methods transabdominal ultrasound, transvaginal ultrasound, pelvic organs, CT, MRI, pelvic organs.

The use of tumor markers for the diagnosis of tumor processes of the pelvic organs.

Oncomarker SA125 . Increased in more than 80% of all patients from RY. Increase in benign gynecological diseases, endometriosis, malignant tumors of other localization, healthy women of reproductive age.

Tumor marker NO4 Secretory protein 4 of the epididymis, acidic glycoprotein

Belongs to the family of proteinase inhibitors and is expressed in normal epithelium

reproductive organs, upper respiratory tract and pancreas.

Increased production was detected at RY and endometrium, rarely - in the widespread form

lung adenocarcinoma.

Tumor marker NO4 With benign gynecological diseases, endometriosis increase level is not observed .

• ***Requirements for work results:***

- To draw up a plan for the necessary clinical, laboratory and instrumental studies in precancerous diseases of the female genital organs
- To evaluate the results of clinical laboratory and instrumental research in precancerous diseases of the female genital organs ;
- Establish a preliminary and clinical diagnosis of the disease;
- Prescribe treatment for precancerous diseases of the female genital organs

• ***Control materials for the final stage of the lesson: problems, tasks, tests, etc***

Unusual situational tasks:

1. Patient 2. A 34-year-old patient turned to the doctor with complaints of heavy vaginal discharge. The last menstruation was a week ago. Sex life since 24

years. Contact bleeding. In the mirrors: on the front lip of the cervix, there is a 1 cm ulcer, a biopsy was taken. Microscopically detected squamous cell carcinoma.

Determine the patient management tactics.

Task:

girl turned to the doctor with complaints of heavy vaginal discharge. Sexual life since 22 years. There were no pregnancies. Does not use contraception, has one sexual partner. The last menstruation was a week ago.

When examined in mirrors: on the front lip of the cervix is a 1 cm area, a biopsy was taken and a diagnosis of grade 1 uterine dysplasia was established.

Determine the patient management tactics. It is necessary to carry out common diagnostics. With the determination of the factor in the development of dysplasia: PCR testing for the presence of VPH type 16-18, HSV type II, culture tank.

After receiving the results of the study, conduct a course of anti-inflammatory and antibacterial therapy.

At the stage of treatment, carry out vaccination with an antiviral vaccine: Cervarix (4-valent) or Gardaxil (4- or 9-valent)

2. A 59-year-old patient turned to a women's consultation with complaints of bloody discharge from the genital tract. Postmenopause 12 years. During vaginal examination: external genitalia with signs of age-related involution, cervix not eroded, slight bleeding from the cervical canal. The uterus is of normal size, the appendages are not palpable.

The arches are deep, not painful. What additional research methods should be conducted to clarify the diagnosis?

To clarify the diagnosis, it is necessary to perform an ultrasound of the small and large organs, to perform a study of the state of the endometrium through the use of: Peipel biopsy or Hysteroscopy with targeted biopsy of the endometrium. . or Separate diagnostic scraping of the mucous cavity of the uterus. According to the results of the histological examination, the volume of surgical intervention in patients will be established.

1. Test tasks STEP-2:

1. Endometrial polyposis occurs more often:
 - a. A. In menopause
 - b. B. After childbirth
 - c. +C. In the climacteric period
 - d. D. During progesterone treatment
 - e. . After stopping oral contraceptives
2. An 18-year-old patient turned to a gynecologist with complaints about the appearance of warty growths in parts of the genitals. During the examination of the external genitalia on the large and small genitals on the lips papilla-like

growths, soft consistency, painless. At gynecological examination revealed no pathology of the internal genital organs. Which preliminary diagnosis?

- A. Acuminate condylomas
- B. Papillomatosis
- C. Syphilitic condylomas
- D. Vegetative pemphigus
- E. Cancer of the vulva

3 . A 53-year-old patient complains of aching pain in the lower abdomen, its significant increase over the last 5 months, weight loss, weakness. During the gynecological examination, it was found: the cervix is clean, the uterus is not enlarged, non-painful, immobile. On both sides, tumors measuring 10x13 cm, with an uneven surface, of a dense consistency, are fixed. Fluctuation is observed when percussing the abdomen. What will be the preliminary diagnosis?

- A. Ovarian cancer
- B. Uterine fibromyoma
- C. Tuboovarian tumor
- D. Wandering kidney
- E. Endometriosis

4. A 22-year-old girl came to the doctor for a routine examination. She smokes 1 pack of cigarettes day for 5 years. Has one permanent sexual partner, uses condoms My paternal grandfather died of a heart attack at the age of 60. When physical examination pulse - 78/min., respiratory rate - 14/min., blood pressure - 110/70 mm Hg. At during auscultation of the heart, a systolic murmur is heard in the II intercostal space to the left of the sternum. Which one would the doctor's recommendation be most appropriate for this patient?

- A. Colposcopy with biopsy
- B. Pass a Pap test
- C. Screening for hyperlipidemia
- D. Pass a Pap test and take an HPV test
- E. Learn to self-examine the mammary glands

4. Summing up (criteria for evaluating learning outcomes).

Current control: oral survey, assessment of communication skills during role play, solving situational clinical tasks, assessment of activity in class.

Final control : credit.

Evaluation of the current educational activity at the seminar session :

1. Evaluation of theoretical knowledge on the subject of the lesson:
 - methods: survey, solving a situational clinical problem
 - the maximum score is 5, the minimum score is 3, the unsatisfactory score is 2
 2. Evaluation of work with patients on the subject of the lesson:
 - methods: assessment of: a) communication skills of communication with the patient b) the correctness of prescribing and evaluating laboratory and instrumental studies before using a contraceptive c) the ability to conduct family planning counseling.
 - the maximum score is 5, the minimum score is 3, the unsatisfactory score is 2
- The grade for one seminar session is the arithmetic average of all components and can only have a whole value (5, 4, 3, 2), which is rounded according to the statistical method.

Current assessment criteria at the seminar session

Rating	Evaluation criteria
" 5 "	The applicant is fluent in the material, takes an active part in discussing and solving a situational clinical problem, confidently demonstrates the skills of counseling on family planning and the correct appointment of laboratory and instrumental studies before using a contraceptive, expresses his opinion on the subject of the class, demonstrates clinical thinking.
" 4 "	The applicant has a good command of the material, participates in the discussion and solution of a situational clinical problem, demonstrates the skills of family planning counseling and the correct appointment of laboratory and instrumental studies before using a contraceptive with some errors, expresses his opinion on the topic of the class, demonstrates clinical thinking.

" 3 "	The applicant does not have sufficient knowledge of the material, is unsure of participating in the discussion and solution of the situational clinical problem, demonstrates the skills of family planning counseling and the correct appointment of laboratory and instrumental studies before using a contraceptive with significant errors.
" 2 "	The applicant does not possess the material, does not participate in the discussion and solution of the situational clinical problem, does not demonstrate the skills of counseling on family planning and the correct appointment of laboratory and instrumental studies before using a contraceptive.

5. List of recommended literature.

Main:

1. Obstetrics and gynecology: in 2 books. - Book 1. Obstetrics: a textbook (University III-I V : r.a.) / V.I. Hryshchenko, M.O. Shcherbiny and others. - K.: Medicine, 2020. - 424 p.
2. Obstetrics and gynecology: National a textbook for medical universities of IV accreditation levels in 4 vols.// Nat. textbook in 4 volumes / V. M. Zaporozhan, T. F. Tatarchuk, I. Z. Gladchuk, V. V. Podolsky, N. M. Rozhkovska, V. G. Marichereda, A. G. Volyanska. - K.: VSV "Medicine", 2017. - 696 c.
3. Clinical Obstetrics and Gynaecology: 4th Edition / Brian A. Magowan, Philip Owen, Andrew Thomson. - 2021. - 454 p.
4. Oats, Jeremy Fundamentals of Obstetrics and Gynecology [Text]: Liewellyn-Jones Fundamentals of Obstetrics and Gynecology / J. Oats, S. Abraham. – 10th ed. – Edinburgh [etc.]: Elsevier, 2017. – VII, 375 p.

Additional:

1. Diagnostics of obstetric and gynecological endocrine pathology: [educational manual for intern doctors and trainee doctors of institutions (fac.) post-diploma. of Education of the Ministry of Health of Ukraine] / edited by V.K. Likhachev; V.K. Likhachev, L.M. Dobrovolska, O.O. Taranovska and others; UMSA (Poltava). – Vinnytsia: E.V. Maksimenko Publisher, 2019. – 174 p.
2. Zaporozhian V.M. Simulation medicine. Experience. Acquisition Prospects: practice. advisor / V.M. Zaporozhian, O.O. Tarabrin – Sumy: University. Book, 2018. – 240 p.
3. The model of screening for preeclampsia in the second and third trimesters of gestation / L. Berlinska, V. Marichereda, O. Rohachevskyi, A. Volyanska, G.

Lavrynenko // Electronic Journal of General Medicine. - 2023 - 20(3), em473,
<https://www.ejgm.co.uk/>

4. Current "Clinical protocols", approved by order of the Ministry of Health of
Ukraine for Obstetrics and Gynecology.

Internet sources for preparation:

1. <https://www.cochrane.org/>
2. <https://www.ebcog.org/>
3. <https://www.acog.org/>
4. <https://www.uptodate.com>
5. <https://online.lexi.com/>
6. <https://www.ncbi.nlm.nih.gov/>
7. <https://pubmed.ncbi.nlm.nih.gov/>
8. <https://www.thelancet.com/>
9. <https://www.rcog.org.uk/>
10. <https://www.npwh.org/>