MINISTRY OF HEALTH OF UKRAINE

ODESA NATIONAL MEDICAL UNIVERSITY

Department of Obstetrics and Gynecology

APPROVED

Vice-rector for scientific and pedagogical work

_____ Eduard BURIACHKIVSKYI

September 1st, 2025

METHODOLOGICAL RECOMMENDATIONS FOR MEDICAL PRACTICE "OBSTETRICS AND GYNECOLOGY"

(THE MAIN DUTIES AND PROFESSIONAL ACTIONS OF THE DOCTOR OF THE GYNECOLOGICAL DEPARTMENT OF THE HOSPITAL)

Level of higher education: second (master's)

Field of knowledge: 22 "Healthcare"

Specialty: 222 "Medicine"

Specialization: "Obstetrics and Gynecology"

Educational and professional program: Medicine

Approved:

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

Protocol No. 1 dated August 27, 2025.

Head of the Department, Doctor of Medicine, Professor _____ Ihor GLADCHUK

Developers:

Ph.D., Associate Professor of the Department of Obstetrics and Gynecology
O. STEPANOVICHUS

Ph.D., Assistant Professor of the Department of Obstetrics and Gynecology
Y. ONYSHCHENKO

Reviewers:

Head of the Department of Histology, Cytology, Embryology and Pathological Morphology with a Course of Forensic Medicine, Doctor of Medical Sciences, Professor Varvara SYTNIKOVA

Ph.D., associate professor of the Department of Surgery
with postgraduate education Sergey POLYAK

TOPIC 1
" Medical techniques in gynaecological practice".

Purpose: to familiarize with the rational scheme of medical manipulations in gynecology for gynecological patients. Perform medical manipulations in the conditions of a medical institution, at home or at work based on a previous clinical diagnosis and/or indicators of the patient's condition, using knowledge about a person, his organs and systems, observing relevant ethical and legal norms, by making a reasoned decision and using standard methods.

Basic concepts (list of questions): manual examination and examination of women in mirrors. Taking smears for bacterioscopic, bacteriological and cytological studies. Clinical examination of mammary glands. Oncoprophylaxis and oncodiagnosis in gynecology.

Basic concepts for the lesson:

1. Anatomy and physiology of female genital organs.
2. Peculiarities of performing medical manipulations in gynecology in a gynecological patient.
3. Formulate deontological principles of survey and examination of a gynecological patient during medical manipulations in gynecology in gynecological patients.
4. Scheme of medical manipulations in gynecology for a gynecological patient.
5. Specific functions of the female body.
6. The structure of external and internal female genital organs.
7. General and special methods of examination of a gynecological patient.

Plan:

1. **Knowledge control.**

1. A 24-year-old woman came to a women's consultation with complaints about a 10-week delay in menstruation. She has 2 spontaneous miscarriages in her history. During the ultrasound examination, one fertile egg was found, which corresponds to 6-7 weeks of pregnancy, the heartbeat of the fetus was not determined. What is the next tactic in this situation?

A. +Scraping of the walls of the uterine cavity
B. Use of uterotonic agents
C. Appointment of hormonal therapy
D. Observation for 1 week followed by ultrasound control
E. Appointment of antibacterial therapy

2. In a 36-year-old patient, during a preventive examination in mirrors, deformation of the cervix due to old postpartum tears was revealed. Colposcopic examination revealed areas of dysplasia on the posterior lip. 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

3.A 24-year-old woman came to the women's consultation with complaints about a 10-week delay in menstruation. She has 2 spontaneous miscarriages in her history. During the ultrasound examination, one fertile egg was found, which corresponds to 6-7 weeks of pregnancy, the heartbeat of the fetus was not determined. What is the next tactic in this situation?

A.+Scraping of the walls of the uterine cavity
B.Use of uterotonic agents
C.Appointment of hormonal therapy
D.Observation for 1 week followed by ultrasound control
E.Appointment of antibacterial therapy

4.In a 36-year-old patient, during a preventive examination in mirrors, deformation of the cervix due to old postpartum tears was revealed. Colposcopic examination revealed areas of dysplasia on the posterior lip. 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

5.On the same night , a 62-year-old patient came to the clinic with complaints about the presence of watery discharge , sometimes bloody discharge from the vagina . Menopause 7 years. Periodically, the patient has slight pains in the lower abdomen, swelling of the intestines. During vaginal examination, the uterus is enlarged up to 10 weeks of pregnancy, has limited mobility, and is sensitive. Add-ons are not defined. What research should be conducted 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

2. **Discussion of theoretical questions.**

The main methods of researching a gynecological patient

Examination of a woman's genital tract in mirrors

Procedure steps:

1. Take the Cuzco double-edged mirror in the dominant hand.
2. With the fingers of the other hand, carefully spread the labia, slowly insert the Cusco double-edged speculum into the vagina parallel to the genital opening, without touching the urethra and clitoris.
3. The two-bladed Cuzco speculum is unfolded in the vagina and opened for examination of the vagina and cervix.

4. Assess the condition of the walls of the vagina and the vaginal part of the cervix: the color and condition of the mucous membrane of the vagina, the nature of vaginal secretions, the shape of the cervix, the length of the vaginal part of the cervix in centimeters, the shape of the external eye of the cervix, the nature of secretions from the cervical canal.

5. Carefully remove the Cuzco double-sided mirror.

Taking swabs for bacterioscopic examination

Procedure steps:

1. Take a glass slide marked U / C / V.
2. Collect the material for bacterioscopic examination from the urethra with a cotton applicator or a Volkmann spoon from a depth of 1.5-2 cm by scraping and apply it to the slide in the area U.
3. Take the Cuzco double-edged mirror in the dominant hand.
4. With the fingers of the other hand, carefully spread the labia, slowly insert the closed two-bladed Kuzko speculum into the vagina parallel to the genital slit, without touching the urethra and clitoris.
5. The two-bladed Cuzco speculum is unfolded in the vagina and opened for examination of the vagina and cervix.
6. Assess the condition of the walls of the vagina and the vaginal part of the cervix: the color and condition of the mucous membrane of the vagina, the nature of vaginal secretions, the shape of the cervix, the length of the vaginal part of the cervix in centimeters, the shape of the external eye of the cervix, the nature of secretions from the cervical canal.
7. Collect material for bacterioscopic examination.
8. spoon or a cytobrush into the cervical canal, take the material by scraping, apply it to the slide in area C.
9. an Air spatula, apply it to the slide in area V.
10. Carefully remove the Cuzco double-sided mirror.

Collection of material for bacteriological examination

Procedure steps:

1. Take three sterile test tubes with applicators. Write the necessary data on them and mark them (urethra, cervical canal, posterior vault of the vagina).
2. Collect material for bacteriological examination from the urethra with an applicator from a depth of 1.5-2 cm. Place the applicator in a suitable sterile test tube.
3. Take the Cuzco double-edged mirror in the dominant hand.
4. With the fingers of the other hand, carefully spread the labia, slowly insert the closed two-bladed Kuzko speculum into the vagina parallel to the genital slit, without touching the urethra and clitoris.
5. The two-bladed Cuzco speculum is unfolded in the vagina and opened for examination of the vagina and cervix.
6. Assess the condition of the walls of the vagina and the vaginal part of the cervix: the color and condition of the mucous membrane of the vagina, the nature of vaginal secretions, the shape of the cervix, the length of the vaginal part of the cervix in centimeters, the shape of the external eye of the cervix, the nature of secretions from the cervical canal.

7. Collect material for bacteriological research.
8. Carefully insert the applicator into the cervical canal, place the applicator in the appropriate sterile test tube.
9. Take the material from the back vault of the vagina with an applicator, place it in a suitable sterile test tube.
10. Carefully remove the Cuzco double-sided mirror.

Collection of smears for cytomorphological examination

Procedure steps:

1. Take the Cuzco double-edged mirror in the dominant hand.
2. With the fingers of the other hand, carefully spread the labia, slowly insert the closed two-bladed Kuzko speculum into the vagina parallel to the genital slit, without touching the urethra and clitoris.
3. The two-bladed Cuzco speculum is unfolded in the vagina and opened for examination of the vagina and cervix.
4. Assess the condition of the walls of the vagina and the vaginal part of the cervix: the color and condition of the mucous membrane of the vagina, the nature of vaginal secretions, the shape of the cervix, the length of the vaginal part of the cervix in centimeters, the shape of the external eye of the cervix, the nature of secretions from the cervical canal.
5. Remove excess secretions with a cotton swab.
6. Take a slide marked Ш (exocervix) and Ц (endocervix).
7. Collect material for cytomorphological examination.
8. Scrape from the surface of the cervix with an Eyre spatula (or a cytobrush bent at 90°) by making a full rotation (360°), apply the material to the slide with a broad stroke, a thin and even stroke under the mark Ш (exocervix) .
9. Insert the cytobrush into the cervical canal, turn it 360° 2-3 times, apply the collected material with rotational movements around its axis to the glass under the mark Ц (endocervix)
10. Carefully remove the Cusco mirror.

Bimanual examination of the pelvic organs of a woman

Procedure steps:

1. With the first and second fingers of the left (right) hand, spread the labia, place the middle finger of the "dominant" hand at the level of the posterior adhesion, gently press on it to open the entrance to the vagina.
2. Carefully and slowly enter the medium finger, then indicatory finger in the vagina along the back wall to the vault and cervix, fourth and fifth bring the fingers to the palm, the thumb take to the top.
3. Determine length and width of the vagina, elasticity walls vagina, sensitivity during palpation, presence membranes, neoplasms, etc.
4. Determine length vaginal parts cervix in centimeters.
5. Determine consistency cervix (tight, soft), patency external eye cervical canal (closed, passes tip finger), evaluate pain excursions cervix
6. Palm second hand carefully put on the stomach (above the symphysis) and moderately press to determine the bottom of the uterine body.

7. Take out the body of the uterus between with two hands and determine: the relative position of the uterus cervix (anteflexio , retroflexio), dimensions uterine bodies (normal, reduced, enlarged), consistency uterine bodies (tight-elastic, soft , compacted), mobility uterine body (relatively mobile, limited moving), sensitivity during palpation (painful, painless).

8. Place the fingers in the bottom of the right lateral vault and, using both hands, palpate the right vaginal vault and the right appendages of the uterus, determine their size, mobility and painfulness.

9. Place the fingers in the bottom of the left lateral vault and, using both hands, palpate the left vaginal vault and the left appendages of the uterus, determine their size, mobility and painfulness.

10. Determine the capacity of the vaginal vaults.

Clinical examination of mammary glands

Procedure steps:

1. Examine the mammary glands, evaluate their shape, skin color, nipples, areas around the nipple (asymmetry, indentation, etc.).

2. Ask the patient put your hands behind your head in a standing position.

3. Carry out sequentially palpation right and left dairy glands, using the pads of the indicative, middle and nominative fingers of the "dominant" hand. Support with the other hand dairy gland First, conduct a superficial, then deep palpation dairy glands

4. During palpation examine mammary tissue glands clockwise arrow or by quadrants and determine her density, homogeneity, sensitivity, presence/absence voluminous neoplasms

5. When detected neoplasm to determine its shape, dimensions, consistency, boundaries formation, mobility, soreness.

6. Carry out palpation lymph nodes in the supraclavicular, subclavian and axillary areas

7. Determine availability pathological secretions from milk glands by careful compression edges areolas between index and thumb, make an estimate secretions (absent, serous, with impurities blood, dairy products, milk, etc.).

Colposcopy: simple and advanced

The colposcope is installed at a distance of 10-15 cm from the entrance to the vagina. With the help of a gynecological mirror, access to the cervix is opened, and with the help of a tampon, serous discharge is removed. The doctor analyzes the color, condition of the cervix and vagina, as well as the vascular network.

Extended colposcopy.

Lugol's solutions and 3% acetic acid are used for extended research. Schiller's test allows you to accurately visualize healthy tissue (it turns brown).

biopsy material taken from these areas is sent for histological examination.

Fractional diagnostic scraping of the mucous cavity of the uterus

The operation is performed under general (intravenous anesthesia) or local (paracervical novocaine anesthesia) anesthesia under strict aseptic conditions. The cervix is exposed with mirrors, treated with a disinfectant, the front lip is grasped with

ball forceps, pulled back a little (with anteflexio uteri) or to the symphysis (with retroflexio uterus). The uterus is probed to determine its length. Then Hegar dilators are introduced into the cervical canal, each of which is 0.5 mm wider than the previous one. Extensions are carried out to No. 12. After dilatation, curette No. 2, No. 4, No. 6 are successively inserted , making sure that its curve coincides with the curve of the uterus. A curette is inserted into the cervical canal and its walls are scraped, collecting the scraping in a separate jar with a 10% formalin solution. The end of the cu is brought to the bottom of the uterus, and then with movements from the bottom to the neck, the mucous membrane is gradually scraped from all the walls of the uterus. The obtained material is filled with 10% formalin solution and sent for histological examination.

Hysteroscopy (stages)

1 . Treatment of the operating field.
2. Exposure of the cervix in mirrors.
3. Fixation of the cervix by the front lip.
4. Treatment of the cervix and vagina with an antiseptic solution.
5. Probing of the uterine cavity.
6. Dilation of the cervical canal with Hegar dilators up to No. 9.
7. Insertion of the hysteroscope tube into the uterine cavity and its examination.
8. If necessary, manipulation in the uterine cavity.
9. Biopsy. Output of the tool.

Examination of the uterine cavity should be complete. After inserting the hysteroscope tube into the uterine cavity, a panoramic hysteroscopy is first performed. At the same time, the tube of the instrument is located behind the inner eye of the cervical canal so that the field of vision covers the entire uterine cavity. It is necessary to determine its shape, dimensions, the presence or absence of deformations of its walls, pathological formations, the height and color of the mucous membrane, to conduct a detailed examination of the endometrium. The tube of the hysteroscope is brought closer to the center of the bottom of the uterus. At the same time, the main landmarks are the eye of the fallopian tubes. After examining the endometrium of the bottom of the uterus, they begin to examine the tubal cells. You should pay attention to their presence, shape, size, nature and height of the endometrium in the area of the tube corners, the presence or absence of pathological formations. Approaching the end of the hysteroscope to the walls of the uterus, the endometrium and the vascular pattern of the surface of the front, back and side walls of the uterus are examined in detail. When pathological formations in the uterine cavity are detected, their consistency is determined with the help of hysteroscopic instruments, if necessary, intraoperative correction of the pathology is carried out. The final stage is a targeted biopsy of endometrial areas and a final examination of the uterine cavity. After the examination, the hysteroscope is removed from the uterine cavity .

Puncture of the abdominal cavity through the posterior vault

Procedure steps:

1. Treat the external genitalia, vagina and cervix with an antiseptic.
2. Carefully, slowly and consistently insert a spoon-shaped mirror and lifter into the vagina, withdraw the vaginal part of the cervix. Hand over the lift to hold the assistant.

3. Grab the back lip of the cervix with ball forceps, remove the lifter, pass the spoon-shaped mirror to the assistant.

4. Using ball forceps, pull the cervix towards you and slightly upwards. Determine the place for the puncture (under the cervix along the middle line, retreating 1 cm from the place of transition of the posterior vault into the vaginal part of the cervix).

5. 1-2 ml of 0.25% solution of novocaine should be injected into the indicated puncture site (before using novocaine, a skin test should be performed for individual sensitivity to the drug).

6. Perform a puncture of the posterior vault of the vagina with a thick puncture needle at least 12 cm long to a depth of no more than 2 cm (when punctured, there should be a feeling of "falling" of the needle into the void). Attach the puncture needle to the syringe. Pull the plunger of the syringe towards you. Place the contents of the abdominal cavity (pus, blood, exudate) in a sterile test tube for further examination.

7. Remove the syringe with the puncture needle, remove the ball forceps from the back lip of the cervix, treat the vagina with an antiseptic, remove the spoon-shaped mirror.

Requirements for work results, including to registration

1. Collect the history of the gynecological patient
2. Conduct a mirror examination
3. Conduct manual research _ _
4. Collect material from the vagina, urethra and cervical canal and evaluate the results
5. Carry out and evaluate diagnostic tests for the functional state of the ovaries
6. Collect material for cytological examination and evaluate the results.
7. Carry out (on a phantom) probing of the uterus and fractional-therapeutic-diagnostic scraping of the mucous membrane of the uterus.

3.Formation of professional skills and practical abilities.

1.A 51-year-old patient complains of significant bloody discharge from the vagina for 15 days . I from the anamnesis: violation of the menstrual function during the year, the patient is suffering from increased blood flow , sleep disturbance . Ultrasound: the uterus corresponds to age norms, the appendages are unremarkable, the thickness of the endometrium 14 мм.

What are the doctor's tactics?

2.A 32-year-old patient turned to the doctor with complaints about the absence of pregnancy for 4 years. 5 years ago, the first pregnancy ended with an artificial abortion. According to vaginal examination and ultrasound, the diagnosis was established: endometrioid cyst of the right ovary. What is the optimal method of treatment?

3.A 30-year-old patient was admitted to the gynecological department with complaints of sharp pain in the lower abdomen, temperature *38.8 °C.* In the anamnesis

- sexual life outside of marriage, 2 artificial abortions. During gynecological examination: the uterus has not changed. Appendages - enlarged, painful on both sides. Discharges from the vagina are purulent, significant.

Determine the further algorithm of the examination.

TOPIC 2

" Family planning counseling, selection of a contraceptive method."

Purpose: in the conditions of a medical institution, on the basis of anamnestic data, a general examination and a gynecological examination of a woman, using knowledge about the reproductive organs of a woman, observing the relevant ethical and legal norms, by making a reasoned decision, using a standard procedure: to evaluate the patient and the medical criteria for the acceptability of the method contraception; determine the patient's examination plan before choosing a contraceptive method; conduct counseling on family planning issues; select a modern method of contraception for different categories of the population.

Basic concepts (list of questions): patient examination plan before choosing a contraceptive method. Evaluation of the patient and the medical criteria for the acceptance of the contraceptive method.

Basic concepts for the lesson:

1.Stages of counseling on family planning.

2.Peculiarities of initial (primary) counseling.

3.Peculiarities of counseling on a specific method of contraception.

4.Peculiarities of counseling on the further use of the contraceptive method.

5.Psychological barriers incounseling and their prevention.

6.Periods of life with the risk of unplanned pregnancy.

7.Evaluation of the patient for providing her with family planning services.

8.An examination is necessary, which is carried out in a planned manner before making a decision on the use of a particular method of contraception.

9.Choosing a modern method of contraception according to the periods of a woman's life.

Plan:

1.Knowledge control.

1. What examinations must be carried out before starting to use IUD ?

a. Standard laboratory tests
b. Blood pressure measurement
c. +Examination of pelvic genital organs
d. Ultrasound of abdominal organs
e. MRI of the brain

2. Which women can use COCs ?

a. +Women after abortion
b. Women with a history of stroke

c. Women with BP 140/90 and >
d. Women over 35 who smoke
e. Women who have breast cancer now or in the past

3. The advantages of the MLA method are:
a. Can be used if the child is 6 months or older
b. +Special medical supervision is necessary
c. No side effects
d. Can be used by women who are not exclusively breastfeeding
e. Can be used after the return of menstruation

2.Discussion of theoretical questions.

An examination is necessary, which is carried out in a planned manner before making a decision in favor of one or another method of contraception.

Kind	**OOK**	**NC**	**EAK**		**ondoms**	**ervical caps**	**ontraceptives for local use**	**emale sterilization**	**Vasectomy**
Examination of mammary glands	ITH	ITH	ITH	ITH	ITH	ITH	ITH	ITH	Not held
Examination of the pelvic/genital organs	ITH	ITH	ITH	ND	ITH	ND	ITH	ND	AND
Cervical pathology screening	ITH	ITH	ITH	ITH	ITH	ITH	ITH	ITH	Not held
Standard laboratory examination	ITH	ITH	ITH	ITH	ITH	ITH	ITH	ITH	WITH

Determination of the level of hemoglobin in the blood	ITH	ITH	ITH	N	ITH	ITH	WITH	N	WITH
STD risk assessment: history taking and general examination	ITH	ITH	ITH	ND*	ITH*	ITH**	WITH**	ITH**	WITH
Screening for STIs/HIV: laboratory examination	ITH	ITH	ITH	N*	ITH*	ITH**	WITH**	ITH**	WITH
Measurement of blood pressure	**	**	**	ITH	ITH	ITH	WITH	ND	WITH****

Class "A" - conducting this examination/analysis is recommended in all cases and is a guarantee of safety and effectiveness of using a specific method of contraception.

Class "B" - conducting this examination/analysis largely ensures the safety and effectiveness of using a specific method of contraception.

Class "C" - conducting this examination or analysis does not provide any significant guarantee of safety and effectiveness of a specific method of contraception.

* If a woman is at high risk of infection with gonorrheal or chlamydial infection, in this case, the introduction of the IUD is not recommended, except in circumstances where it is impossible or unacceptable to use alternative methods of contraception for one reason or another.

** Women at high risk of HIV infection should not use spermicides containing nonoxynol-9.

*** Blood pressure measurement is recommended before starting the use of COC, TKP, IKP.

**** Procedures performed using local anesthesia.

Family planning for different categories of the population and according to life periods

Provisions of the protocol	**Justification**	**Necessary actions**
5.1. Methods of contraception for teenagers and young people.	Teenage pregnancy is always unplanned. First of all, teenage pregnancy carries a higher health risk, the younger they are (it is	*Mandatory:* Conduct counseling on healthy lifestyle, sex education, prevention of unplanned pregnancy and STDs.

	especially significant for 13-16-year-olds). According to WHO recommendations, "...adolescents should have great freedom in choosing contraceptive methods. Age is not a basis for restricting access to one or another method of contraception." Therefore, adolescents who have sexual relations should have freedom of choice when using contraceptive methods. All types of contraception are safe for teenagers and young adults. ("Medical criteria for the acceptability of the use of contraceptive methods", 4th edition, 2009).	Start counseling about contraceptive methods with a conversation about the most reliable method of avoiding pregnancy - the absence of sexual contact. 3. Offer methods of contraception: ***Condom:*** protects against STIs/HIV; use is simple and without a visit to the doctor; has no side effects. ***COC:*** for young women who have a regular sex life and a permanent sexual partner; does not protect against STIs/HIV. ***Double*** **method** (simultaneous use of COCs with a condom). ***IUD:*** do not offer to teenagers and young women who have not given birth and do not have one sexual partner; does not protect against STIs/HIV. ***Fertility recognition methods:*** can be offered to disciplined girls with a regular menstrual cycle who are highly motivated to use this method and have one partner; does not protect against STIs/HIV. ***Emergency contraception:*** high efficiency; cannot be used as regular contraception, only for episodic use with irregular sexual life; does not protect against STIs/HIV.
5.2. Methods of contraception for women in the postpartum period	The key issues of postpartum contraception are the beginning of the period of prevention of unplanned pregnancy and the effect of the method of contraception on lactation. According to research data, menstruation	Mandatory: 1. To provide counseling on the peculiarities of the course of the postpartum period and the use of family planning methods. 2. Offer methods of contraception: **Method of lactational amenorrhea (MLA):**

	resumes up to 6 months after childbirth in 11.1-39.4% of cases, and the contraceptive effectiveness of MLA ranges from 93.5 to 100% Contraceptives of the progestogen series do not affect the quality and quantity of breast milk and the health of the child. The use of COCs in the first 6 months after childbirth reduces the amount of breast milk and can negatively affect the normal growth of the child, and in the first 3 weeks after childbirth COCs increase the risk of thrombosis. VMC are contraindicated for women with complicated childbirth (bleeding, anemia, infections); VMC and DHS do not affect the quantity and quality of breast milk (WHO 2012).	breastfeeding immediately after childbirth and up to 6 months exclusive breastfeeding (at least 8-10 times a day) in the absence of menstruation (amenorrhea); high efficiency and significant benefits for the health of both the mother and the child. **Contraceptives of the progestogen series:** to women who use MLA only 6 months after childbirth; women who are not breastfeeding can be used immediately, provided there is no pregnancy; to women who breastfeed, but alternate with complementary foods - 6 weeks after childbirth. **Intrauterine contraceptives:** post-placental or within 48 hours after childbirth or caesarean section, which occurred without complications; in the postpartum period only after 4 weeks, if not administered postplacentally. **Combined oral contraceptives (COC):** not recommended for women who are breastfeeding in the first 6 months after childbirth; if the woman is not breastfeeding, the COC can be used 3 weeks after childbirth. **Voluntary surgical sterilization (VSS):** immediately after delivery, during cesarean section or within 7 days after delivery; if sterilization is not carried out after 7 days, carry out only 6 weeks after childbirth. **Barrier methods:** from the time sexual activity resumes (cervical caps - 6 weeks after childbirth). **Methods of recognizing fertility:** it is not recommended to

		start using it before the restoration of regular menstruation.
5.3. Methods of contraception for women after abortion	Post-abortion family planning services: - counseling about the need to use contraception and about all available methods of contraception, their characteristics, effectiveness and side effects; - making it possible to make an informed choice of contraceptive methods; - providing information about the need to protect against STIs. Family planning services for a post-abortion woman should be started immediately, as she may ovulate as early as the 11th day after the abortion and usually occurs before her first period. The ability to conceive is restored very quickly - within 2 weeks after an artificial or spontaneous abortion that took place in the 1st trimester of pregnancy, and within 4 weeks after an artificial or spontaneous abortion that took place in the second trimester of pregnancy. After an uncomplicated abortion in the first trimester, all methods of contraception are suitable.	Mandatory: Conduct counseling on the features of the post-abortion period and the use of family planning methods. Uncomplicated abortion: - after an abortion up to 12 weeks, it is not necessary to postpone the use of contraceptive methods. - after an abortion after 12 weeks, barrier methods (cervical caps), surgical sterilization and IUD insertion can be recommended after 4-6 weeks. **<u>Uncomplicated abortion:</u>** ***Hormonal drugs:*** the first COC or TKP pill is given immediately on the day of surgery; hormonal patch, vaginal ring can be started to be used immediately after the abortion. ***Injectable drugs:*** can be administered immediately after the abortion or within 7 days after the operation. ***IUDs*** (containing copper) or ***IUDs*** (with levonorgestrel): immediately after the abortion or within 7 days (for IUDs with levonorgestrel) and 12 days (for IUDs containing copper), provided there are no symptoms of infection. **Barrier methods** (condoms, spermicides): since the resumption of sexual activity. ***Fertility recognition methods:*** only after the restoration of a regular menstrual cycle. **<u>Complicated abortion:</u>**

		you can use hormonal oral contraceptives, injection methods, condoms; IUD and sterilization should be postponed until the complication is resolved. **Medical abortion:** you can start using hormonal contraception already after taking the first pill according to the medical abortion scheme; complete termination of the abortion should be confirmed before the introduction of an intrauterine contraceptive or sterilization.
5.4. Methods of contraception for women approaching menopause.	According to the statistics of the countries of Western Europe, 50% of women aged 44 and 30% of 45-50-year-olds are sexually active, have a preserved menstrual cycle, are able to conceive and need contraception (WHO, 2009) . Abortions in these women are characterized by a 3-fold increase in the frequency of complications compared to women of reproductive age, frequent exacerbation of gynecological and extragenital pathology. Therefore, the purpose of contraception in women after 40 is not only to prevent unplanned pregnancy, but also to preserve health. In perimenopause, in contrast to reproductive age, smoking is an absolute contraindication to the use of COCs. The use of COCs, combined patches	Mandatory: 1. Conduct counseling on the peculiarities of the "transitional" period and the use of family planning methods. 2. Choosing a contraceptive method taking into account the woman's state of health after a medical examination. 3. Counseling on ending the use of contraceptives (if a woman has had no menstrual bleeding for 12 consecutive months). Combined hormonal contraceptives: • in accordance with WHO recommendations, it is advisable to offer combined micro- and low-dose COCs of the latest generation. Contraceptives of the progestogen series: • for women for whom the use of contraceptives containing estrogens is contraindicated; • do not offer DMP (depot medroxyprogesterone) to women who belong to the risk group of osteoporosis or have its manifestations.

	and vaginal rings is contraindicated in women over 35 years of age with migraine pain (regardless of whether such pain is accompanied by migraine aura).	Barrier methods and spermicides: • effective methods of contraception for older women. IUD: • prefer the hormonal intrauterine device, which has a protective and therapeutic effect .
5.5. Methods of contraception for men.	Participation men in process planning seven ' and¨ implies : responsibility in acceptance _ _ decision about method planning seven ' and¨ with purpose preservation I 'm healthy women and his own own ; software safe sexual behavior ; _ _ readiness use parallelˇ method contraception¨ for more guaranteed prevention unplannedˇ pregnancy and STI (double Dutch method) _ _ _ _ Male contraception is of particular importance in those cases when a woman cannot or is not ready to use contraceptives due to the existing situation, or according to the state of health. (WHO 2011)	Mandatory: 1. Conduct counseling on the advantages and disadvantages of contraception in men. Barrier methods: • the condom can be treated with spermicide for additional protection. Surgical: • vasectomy - male surgical sterilization. The contraceptive effect is achieved by blocking the vas deferens. Behavioral: • abstinence from sexual intercourse.

3.Formation of professional skills and practical abilities.

1 **.** A 17-year-old girl sought counseling regarding pregnancy prevention and STDs. Menstruation from the age of 11, there are often delays from several days to a month. Over the past year, she has noticed a significant increase in body weight, which is very upsetting to her. She needs reliable contraception and, preferably, to regulate the menstrual cycle.

What are the doctor's actions ?

2 **.** To doctor turned to women 's counseling woman D. , which is 5 days ago did artificial abortion . _ Blood pressure 120/70 , pulse 78 bpm . To pregnancy woman used bar ' ernii˘method prevention pregnancy , complications not was , wishes more hope˘nii˘method contraception¨. It is known from the anamnesis that she suffers from gallstone disease with frequent periods of exacerbation. The doctor recommended the woman to start using COCs after the next menstruation.

What modern methods of contraception are more acceptable for her?

3.A 32-year-old woman turned to a gynecologist with complaints of chronic pelvic pain that worsens during menstruation, dyspareunia, bleeding before and after menstruation. Last period 3 weeks later. When examined in mirrors: on the cervix, there are 2 cysts with a diameter of 3 and 5 mm, blue-purple in color, from which a dark brown liquid is secreted. During bimanual examination: the body of the uterus is spherical in shape, enlarged up to 6 weeks of pregnancy, painful during palpation. Appendages on both sides without features. The doctor was informed that the birth of a child is not planned in the near future.

4.A 26-year-old woman who gave birth 7 months ago has been troubled by nausea, vomiting in the morning, and drowsiness for the past two weeks. She is breastfeeding, there was no menstruation. She was not warned against pregnancy.

Which of the methods should be used to clarify the diagnosis ?

TOPIC 3
"Urgent care management of abnormal uterine bleeding".

Purpose: to acquire practical skills in providing emergency care for abnormal uterine bleeding. Based on the data of etiopathogenesis and classification of disorders of the reproductive system, master and improve the skills of collecting anamnesis, examination in mirrors, bimanual examination.

Based on the data obtained, determine the patient's examination plan, be able to make a preliminary diagnosis. Be able to evaluate the results of clinical and laboratory examination of the patient. Drawing up an algorithm for providing emergency care at AUB.

Basic concepts (list of questions): abnormal uterine bleeding. Etiopathogenesis and classification of AUB. What examination is necessary for a patient with AUB. Evaluation of the results of clinical and laboratory examination. Algorithm for providing emergency care in AUB.

Basic concepts for the lesson:

1.Abnormal uterine bleeding (AUB), definition.
2.Etiological and pathogenetic factors in disorders of the reproductive system.
3.Classification of abnormal uterine bleeding.
4.Plan of examination of a patient with AUB.
5.Drawing up an algorithm for providing emergency care for AUB.
6.Drug treatment of AUB.
7.Indications for surgical treatment of AUB.

Plan:

1.Knowledge control.

1.The following methods are used for surgical treatment of abnormal uterine bleeding:

A. Colposcopy
B. Culdocentesis
C. Laparoscopy
D. +Fractional diagnostic curettage
E. Hysterosalpingography

2. A 47-year-old woman was delivered to the gynecological department with complaints of moderate bloody discharge from the genital tract after a delay in menstruation for 2 weeks. The menstrual cycle is regular, without features. Which of the following methods is the most informative?

A. Laparoscopy
B. Colposcopy
C. +Hysteroscopy and curettage of the uterus
D. Hysterosalpingography

3.A 20-year-old female patient consulted a gynecologist with complaints of absence of menstruation for 7 months. From the anamnesis: at an early age suffered from childhood infections and sore throats, menarche since the age of 12, regular periods, menstrual cycle - 28 days, menstruation lasts 5-6 days, painless. 7 months ago she suffered stress. During the gynecological examination, no changes in the uterus and appendages were not detected.

What is the most likely diagnosis?

A. +Secondary amenorrhea.
B. Primary amenorrhea.
C. Algodysmenorrhea.
D. Oligomenorrhea.
E. False amenorrhea.

4.A 36-year-old woman came to the gynecological hospital with complaints of on significant bleeding from the genital tract and delayed menstruation for 1 month. Bimanual examination: cervix barrel-shaped, soft consistency. The uterus is of normal size, slightly softened. Appendages without features on both sides. In mirror examination: cervix is cyanotic, enlarged in size, the external ocellus is dilated to 0.5 cm. Urine test for hCG is positive.

What is the most likely diagnosis?

A. +Cervical pregnancy.
B. Uterine pregnancy.
C. Abortion on the move.
D. Threatened abortion.
E. Ectopic pregnancy.

2.Discussion of theoretical questions.

Unified clinical protocol for the staged provision of medical care for abnormal uterine bleeding (AUB) - Order of the Ministry of Health of Ukraine of 13.04.16 No. 353 (as amended on 23.09.16 No. 994).

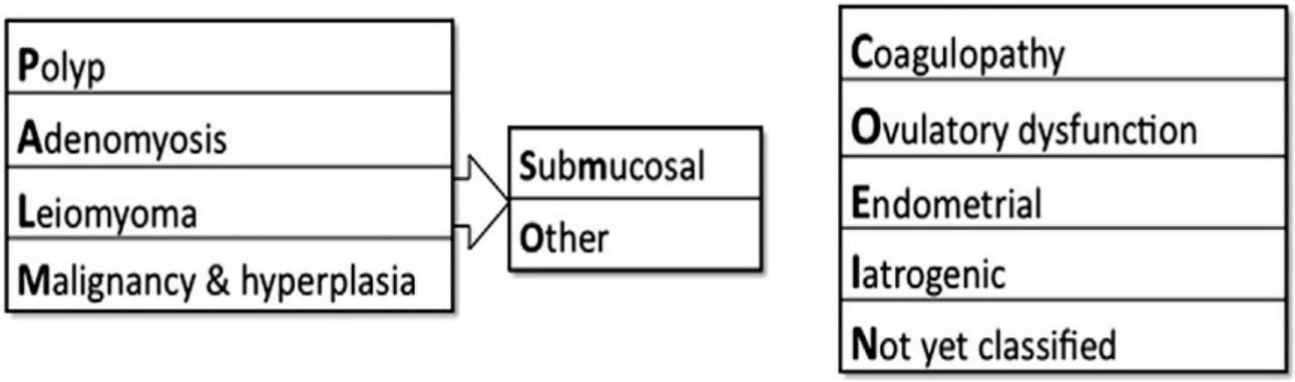
Abnormal uterine bleeding (AUB) is any abnormality of the menstrual cycle, including changes in the regularity and frequency of menstruation, the duration of bleeding, or the amount of blood lost.

- **Acute** AUB are bleeding episodes in non-pregnant women of reproductive age, the intensity of which requires immediate intervention to prevent further blood loss.
- **Chronic** AUB is bleeding with abnormal duration, volume, and/or frequency that has occurred for most of the last 6 months.
- **Heavy menstrual bleeding (HMB)** is excessive menstrual blood loss that negatively affects a woman's physical condition, social, emotional and/or material aspects of her life.

Classification (PALM\COEIN)

to determine the causes of AUB not related to pregnancy

STRUCTURAL **NON STRUCTURAL**



NORMAL LIMITS FOR THE MENSTRUAL CYCLE (FIGO, 2011)

Parameter	Normal	Abnormal	☑
Frequency	Absent (no bleeding) = amenorrhea		☐
	Infrequent (>38 days)		☐
	Normal (≥24 to ≤38 days)		☐
	Frequent (<24 days)		☐
Duration	Normal (≤8 days)		☐
	Prolonged (>8 days)		☐
Regularity	Normal or "Regular" (shortest to longest cycle variation: ≤7-9 days)*		☐
	Irregular (shortest to longest cycle variation: ≥8-10 days)*		☐
Flow Volume (patient determined)	Light		☐
	Normal		☐
	Heavy		☐

Intermenstrual Bleeding (IMB) Bleeding between cyclically regular onset of menses	None		☐
	Random		☐
	Cyclic (Predictable)	Early Cycle	☐
		Mid Cycle	☐
		Late Cycle	☐

Unscheduled Bleeding on Progestin ± Estrogen Gonadal Steroids (birth control pills, rings, patches or injections)	Not Applicable (not on gonadal steroid medication)	☐
	None (on gonadal steroid medication)	☐
	Present	☐

Algorithm of examination of a patient with AUB:

1. Collection of anamnesis.
2. Physical examination.
3. Laboratory methods of examination:

- Papanicolaou smear according to indications; in case of suspicion of sexually transmitted infections.
- Complete blood count (anemia screening), with normal hemoglobin content - determination of ferritin level (iron depot status);
- Determination of human chorionic gonadotropin (β-subunit) in serum or urine, rapid pregnancy test;
- determination of the level of hormones: thyroid-stimulating hormone (TSH), free thyroxine (T4f ree), prolactin (detection of subclinical hypothyroidism and hyperprolactinemia);
- in case of a history of severe bleeding, starting with menarche; other types of bleeding or signs of coagulation disorders in the family history - a coagulogram and consultation with a hematologist.

4. Instrumental methods:

- transvaginal (transrectal) ultrasound or saline infusion sonohysterography;

- Blind aspiration biopsy with histological examination of the obtained material;
- diagnostic hysteroscopy with targeted biopsy.

5. Differential diagnosis according to the classification of AUB according to PALM-COEIN.

Differential diagnosis.

When determining the diagnosis of AUB, it is necessary to exclude the presence of structural pathologies, as well as bleeding associated with pregnancy. In adolescence, the cause of abnormal uterine bleeding is mainly ovulation disorders associated with immature hypothalamic-pituitary-ovarian regulation. Particular attention in patients of this category should be paid to the exclusion of AUB caused by somatic pathology (coagulopathy and others) and bleeding due to arteriovenous malformations of the uterus.

Emergency care at AUB.

Acute AUB.

In the case of acute AMI, if vital functions are impaired, their parameters (blood pressure, heart rate, respiratory rate, temperature) are stabilized and hypovolemia is eliminated. Drug treatment is the therapy of choice for most patients (if clinical circumstances allow). The method of treatment is chosen taking into account the severity of the condition, anamnesis, concomitant pathology and the presence of contraindications.

One of the following medications can be used to treat acute AMC: tranexamic acid, combined oral contraceptive, oral progestogens (Table 1). When using hemostasis with combined oral contraceptives, the risk of thromboembolic complications is taken into account.

Table 1

Drug	One dose	Mode
Combined oral contraceptive	Monophasic (30-35 mcg ethinylestradiol)	3 times a day for 7 days or up to 4-5 times a day for 3-5 days, then decrease every 2 days by 1 tablet. The total period of use of COC is at least 20 days.

Tranexamic acid	1.5 g orally or 10 mg/kg intravenously (maximum up to 600 mg)	3 times a day for 5 days, every 8 hours.
Linestrenol	5 mg orally	3 times a day for 7 days.

Surgical methods for the treatment of acute AUB, depending on the clinical situation and technical capabilities, include endometrial ablation/resection, uterine artery embolization, hysterectomy, and specific surgical treatment in case of structural pathology.

Dilatation and curettage are not the method of choice, except in cases of severe conditions caused by acute AUB that cannot be controlled by medical therapy and there is no possibility of other surgical interventions.

Chronic AUB.

If the cause of uterine bleeding is a systemic disease, it should be treated by a specialized specialist.

If structural pathology of the pelvic organs is detected, treatment should be carried out in accordance with the relevant clinical protocols.

After excluding structural pelvic pathology, medical treatment should be considered as the first line of therapy for AUB.

Treatment objectives:

1. Reduction of blood loss during menstruation.
2. Prevention of relapses.
3. Correction of anemia.
4. Improving the quality of life.

The medical treatment of iron deficiency anemia is carried out with oral forms of iron preparations (tablets, liquid forms). In the case of acute AUB, intravenous iron preparations may be used. The effectiveness of drug treatment is evidenced by an increase in hemoglobin levels by 20 g/L after 21 days from the start of drug treatment. If the response to treatment is positive, treatment continues. A complete blood count is performed monthly. Treatment is continued for 3 months after hemoglobin and ferritin levels are normalized (protocol for the management of patients with iron deficiency anemia).

Medication treatment of AUB

Before prescribing treatment, a woman's reproductive plans and the need for

hormonal contraception are determined. Ethamsylate is not used for the medical treatment of abnormal uterine bleeding.

Hormonal methods of treatment of AUB

If there are no contraindications and the woman approves this method of treatment, the following hormonal medications are prescribed: intrauterine system with a progestogen or a combination of estradiol valerate and dinogest in a dynamic dosing regimen; combined oral contraceptives; oral gestagens or long-acting progestogen injections.

- *Intrauterine system with progestin.*

The intrauterine system with levonorgestrel (LNG-IUD), in the absence of significant structural pathology, significantly reduces menstrual blood loss and helps to increase hemoglobin and ferritin levels.

- *Combined oral contraceptives.*

The only combination of estrogen and progestin indicated for the treatment of AUB is estradiol valerate + dienogest in a dynamic dosing regimen. Combined oral contraceptives containing ethinylestradiol can be used in the treatment of chronic abnormal uterine bleeding in both cyclic and mainly continuous regimens, taking into account thrombotic risks.

- *Oral progestins.*

The use of progestins in the regimen from the 5th to the 25th day of the menstrual cycle (at least 20 days in the cycle) is accompanied by a reduction in menstrual blood loss. The use of progestins only in the luteal phase of the cycle is not an effective treatment for abnormal uterine bleeding.

- *Gonadotropin-releasing hormone agonists.*

Prescription of gonadotropin-releasing hormone agonists is considered when all other treatments are contraindicated or associated with a high risk of complications, or the patient refuses to use them.

Non-hormonal treatments

If abnormal uterine bleeding is accompanied by dysmenorrhea, nonsteroidal anti-inflammatory drugs (NSAIDs) are preferred over tranexamic acid.

Nonsteroidal anti-inflammatory drugs inhibit prostaglandin synthesis by changing the ratio between prostaglandins and thromboxane, which contributes to vasoconstriction in the uterus. As a matter of routine, NSAID therapy should be started the day before menstruation and continued until bleeding stops (3-5 days). There are no significant differences in efficacy between different NSAIDs.

Fibrinolysis inhibitors.

In women with abnormal uterine bleeding, the endometrium has an increased

level of plasminogen activators with more pronounced local fibrinolytic activity. Tranexamic acid (a plasminogen activator inhibitor) is an antifibrinolytic that binds reversibly to plasminogen, reducing local fibrin breakdown without changing blood clotting parameters.

The use of non-steroidal anti-inflammatory drugs and/or tranexamic acid is discontinued if there is no positive dynamics of bleeding reduction within three menstrual cycles.

Indicators of ineffective drug therapy:

- In acute AUB - no dynamics of blood loss reduction within 12 hours after the initiation of therapy with the development of hemodynamic and/or hematologic complications;
- In chronic AUB - no dynamics of blood loss reduction within 3 months after the initiation of therapy.

Surgical methods of treatment of A AUB.

Indications for surgical treatment of women with AUB: -- ineffectiveness of medical therapy,

- inability to use medical therapy (adverse reactions, contraindications, etc.)
- structural pathology of the uterus.

Surgical methods:

- hysteroscopic ablation/resection with mandatory histological examination of the endometrium;
- dilatation and curettage (scraping of the uterine cavity) with a mandatory histological examination of the endometrium;
- endometrial ablation;
- embolization of the uterine arteries;
- hysterectomy;
- surgical methods of treating structural pathology of the uterus.

The ideal approach to therapy is to select treatment methods ranging from less invasive to more invasive.

3.Formation of professional skills and practical abilities.

1. A 28-year-old female patient was admitted to the gynecological department with complaints of acute left lower abdominal pain, nausea, vomiting. Bimanual examination: the body of the uterus was of normal size, its displacement was painful, the left ovary was slightly enlarged, rounded, painful. The vaginal vault is deep, palpation on the left is painful. In the mirrors: the cervix and vaginal mucosa are unchanged. Which of the examination methods is the most informative?

2. A 32-year-old patient complains of a 14-day delay in the next menstrual period. Menstruation since the age of 12, 3-4 days, cycle 28-30 days Sexual life is regular, not protected from pregnancy. On examination: satisfactory condition, soft, painless abdomen, blood pressure 115/75 mm Hg, pulse 74 per 1 min. Transvaginal echography diagnosed a tubal pregnancy. Tactics of the doctor of the antenatal clinic?

3.A 48-year-old woman with abnormal uterine bleeding after a 10-day delay in menstruation was admitted to the gynecology department. The menstrual cycle is

regular, without features. Which of the research methods is the most informative?

4.A 26-year-old patient complains of a 12-day delay in the next menstrual period. Menstruation since the age of 15, 5-6 days, 29-30 days later. Sexual life since the age of 18, regular. On examination: general condition satisfactory, abdomen soft, painless, blood pressure 110/70 mm Hg, pulse 70 per 1 min. During transvaginal echography, there is a suspicion of a progressive tubal pregnancy. What is the doctor's tactic?

TOPIC 4
"Major and minor gynaecological operations".

Purpose: to be able to draw up a plan for the examination of a patient before elective and urgent surgery. To make a plan of preoperative preparation for planned and urgent gynecological operations. Gain practical skills in the management of the postoperative period.

Basic concepts (list of questions): preoperative preparation, examination of the patient, major and minor gynecological operations, urgent surgical interventions, planned surgical interventions, postoperative period.

Basic concepts for the lesson:

1. Definition of "major gynecological operations".
2. Definition of "minor gynecological operations".

3. Preparation of a gynecological patient for emergency surgery.
4. Preparation of the patient for planned surgical intervention.
5. Create an algorithm for examining a patient before emergency surgery.
6. Create an algorithm for examining a patient before a planned surgical intervention
7. Management of the postoperative period.

Plan:

1.Knowledge control.

1. A 33-year-old woman has undergone two previous operations for ectopic pregnancy, both fallopian tubes were removed. She came to the consultation with the question: what can be done to get pregnant?

A. +In vitro fertilization
B. Insemination with her husband's sperm.
C. Surrogate motherhood.
D. Artificial insemination with donor sperm.
E. Induction of ovulation.

2. A 36-year-old woman came to the gynecological hospital with complaints of on significant bleeding from the genital tract and delayed menstruation for 1 month.

Bimanual examination: cervix barrel-shaped, soft consistency. The uterus is of normal size, slightly softened. Appendages without features on both sides. In mirror examination: cervix is cyanotic, enlarged in size, the external ocellus is dilated to 0.5 cm. Urine test for hCG is positive. What is the most likely diagnosis?

A. +Cervical pregnancy
B. Uterine pregnancy.
C. Abortion on the go.
D. Threatened abortion.
E. Ectopic pregnancy.

2.Discussion of theoretical questions.

Standard examination of gynecological patients for planned endoscopic intervention (operative hysteroscopy, laparoscopy) (according to the order of the Ministry of Health of Ukraine № 620 of 29.12.2003)

1. General physical examination
2. Determination of blood group and Rh factor
3. Blood test for RV, HIV, Hbs - a / h
4. Complete blood count and urine test
5. Blood sugar test

6. Bacteriological analysis of genital tract discharge (urethra, cervical canal, vagina)
7. Biochemical blood test (total protein, creatinine, bilirubin, liver tests)
8. Coagulogram
9. Oncocytological examination of smears from the cervix and cervical canal or the result of pathological examination
10. Electrocardiogram
11. FG or chest radiography
12. Examination by a therapist
13. Examination by specialized specialists according to indications
14. Ultrasound examination of the pelvic organs
15. Colposcopy

Standard examination of gynecological patients before scheduled "minor" diagnostic and therapeutic surgical interventions (according to the Order of the Ministry of Health of Ukraine No. 620 of December 29, 2003)

1. General physical examination
2. Blood group and Rh factor
3. Oncocytological examination
4. Bacterioscopic examination of the genital tract discharge

Standard examination of gynecological patients before urgent surgical intervention (according to the order of the Ministry of Health of Ukraine No. 620 of 29.12.2003)

1. General physical examination
2. Blood group and Rh factor

Antibiotic prophylaxis is carried out during induction anesthesia by intravenous drip administration of antibiotics. According to indications, re-administration of antibiotics in the postoperative period is performed in 6-12 hours.

Indications, contraindications, conditions, and technical features of female genital surgery.

The choice of access to the abdominal cavity depends on the urgency, indications for it; localization of the pathological process; concomitant diseases; and the presence of scars after previous interventions. There are laparotomy, laparoscopic, and vaginal access.

I. Major and minor gynecological interventions.

Minor gynecological surgeries: cervical biopsy, uterine probing, polypectomy, fractional curettage of the uterine cavity, hysteroscopy, abdominal puncture through the posterior vaginal vault, vacuum aspiration of the ovum up to 5 weeks, induced abortion up to 12 weeks.

II. Surgeries for prolapse and prolapse of the female genital organs: anterior, posterior (colpoperineorrhaphy) and middle (Leffor-Neugebauer operation) colporrhaphy.

III. Cervical surgery: cone-shaped cervical amputation according to Sturmdorf, wedge-shaped cervical amputation according to Schroeder, polyp removal, diathermocoagulation, diathermoexcision, cryodestruction.

IV. Gynecological operations: Tubectomy, salpingostomy, ovarian resection, adnexectomy.

V. Conservative surgeries are performed on the uterus (with the preservation of the organ or most of it, which allows a woman to preserve menstrual and reproductive functions); plastic (in case of congenital malformations and reproductive disorders) and radical (removal of the uterus or most of it). Indications: uterine fibroids, adenomyosis, atypical endometrial hyperplasia, cancer of the body and cervix, developmental anomalies.

VI. Radical surgeries: Supravaginal amputation of the uterus without appendages, Extirpation of the uterus with appendages. Radical hysterectomy with pelvic lymphadenectomy (Wertheim operation), Radical hysterectomy according to Clarke-Wertheim, Bohman.

Laparoscopy is an examination of the abdominal organs with an endoscope for the purpose of diagnosing and performing therapeutic surgical interventions.

Indications for urgent laparoscopy: Ectopic pregnancy, ovarian apoplexy with intra-abdominal bleeding, rupture of an ovarian cyst, torsion of the ovarian tumor "leg", purulent inflammatory diseases of the pelvic organs (purulent salpingitis, pyovar, piosalpinx, purulent tubo-ovarian formations, abscesses of the uterine vesicle and recto-uterine space), differential diagnosis of acute surgical and gynecological pathology, necrosis of sub-serous myomatous nodes, diagnosis of complications during or after gynecological procedures

Indications for routine laparoscopy: Diagnostic laparoscopy, tubal sterilization, ovarian tumors, uterine fibroids, abnormalities of the internal genital organs, chronic pelvic pain, monitoring the effectiveness of treatment of endometriosis of the III-IV stage, oncological and gynecological diseases ("second look" after combined treatment of ovarian cancer).

Hysteroscopy is an examination of the walls of the uterine cavity with an endoscope for the purpose of diagnosis and therapeutic surgical interventions

Indications for urgent hysteroscopy: Menorrhagia or metrorrhagia, metrorrhagia after pregnancy, birth of submucous fibroids, necrosis of submucous fibroids

Indications for routine hysteroscopy: Abnormal uterine bleeding, submucosal uterine fibroids, endometrial polyp, endometrial hyperplasia, suspected endometrial cancer, intrauterine synechiae, adenomyosis, uterine developmental abnormalities, foreign bodies in the uterine cavity, infertility, monitoring the effectiveness of treatment of hyperplastic endometrial processes

Contraindications to hysteroscopy: Profuse uterine bleeding, pregnancy, acute inflammatory diseases of the female genital organs, infectious diseases, cervical cancer, cervical stenosis

Postoperative management of patients.

The postoperative period is the time that passes from the moment of surgery to recovery.

Algorithm of gynecological patient management in the postoperative period.

1. care in the early postoperative period
2. control of genital tract discharge
3. control of hemodynamics
4. control of blood sugar (in case of long-term operations)
5. control of the absence of symptoms of peritoneal irritation

Postoperative management of patients is based on monitoring of the cardiovascular, respiratory, urinary systems, and laboratory data. The frequency of postoperative complications is reduced with a complete examination, correct diagnosis, reasonable scope of surgery, assessment of the patient's general condition, and adequate preoperative preparation.

The postoperative period is aimed at preventing and timely detecting possible complications. Adequate anesthesia, infusion therapy, antibacterial therapy, prevention of bleeding and thromboembolism, normalization of intestinal motility, exercise therapy are provided.

In the postoperative period, hemodynamics, respiration, drainage and genital discharge, the amount of fluid administered, diuresis, and laboratory parameters are monitored. Patients may complain of headache, drowsiness, dizziness, nausea, vomiting, pain at the intervention site, and urinary retention. Oral nutrition is allowed 24 hours after surgery (in the absence of nausea or vomiting). Laparoscopy can be accompanied by various complications. Some of them are detected during laparoscopy and often require a transition to laparotomy to eliminate them. Others appear in the postoperative period and are accompanied by corresponding symptoms.

Injuries to the gastrointestinal tract are diagnosed within the first four days (sometimes later). Symptoms are acute abdominal pain, fever, nausea and vomiting, diarrhea, leukocytosis. The diagnosis is confirmed by X-ray, ultrasonography. Treatment is surgical.

Injuries of the bladder, ureter. Bladder injuries can occur when inserting a Veresch needle, trocar, tissue dissection, coagulation. If the injury is diagnosed during surgery, it is necessary to restore tissue integrity or drainage. In the postoperative period, undiagnosed bladder injuries are manifested by hematuria, decreased diuresis, anuria, suprapubic hematoma, peritonitis, and urinary ascites. Localization of the injury is established by means of a retrograde cystogram. Treatment is surgical. In case of extraperitoneal bladder injury, a permanent Foley catheter is inserted (1-4 weeks). Ureteral injuries are diagnosed on the basis of such signs as fever, abdominal pain, flank pain, intestinal paresis, signs of peritonitis, hematuria, leukocytosis. To clarify the diagnosis, intravenous urography is performed. Treatment is surgical.

Infectious complications after laparoscopic surgery include wound (suppuration of puncture sites) and intra-abdominal infections. Diagnosis is based on physical examination and auxiliary diagnostic methods. Treatment tactics include measures of local and general influence on the inflammatory process. Prevention of infectious complications is carried out at the preoperative stage, intraoperatively and in the postoperative period.

Postoperative hernias are formed in case of unstitched fascial defects at the sites of trocars insertion. The intestines may be trapped in the hernia defect. They are

manifested by localized pain syndrome, sometimes by signs of intestinal obstruction. Prevention consists in evacuation of gas from the abdominal cavity before the removal of trocars; trocars are removed while the patient is relaxed. Punctures after 10 mm of trocars should be fully sutured. Therapeutic tactics include hernia repair.

Hysteroscopy The management of the postoperative period is aimed at preventing and detecting possible complications in a timely manner.

Postoperative bleeding can occur after resection of the endometrium or uterine fibroids with a significant interstitial component, as a result of scab detachment after endometrial ablation, and as a result of cervical trauma. To find out the source of bleeding, an examination in mirrors is performed. Treatment consists of prescribing uterotonic agents, antibiotics (except in cases of cervical bleeding). If the bleeding continues, a revision of the uterine cavity, repeated hysteroscopy, embolization of the uterine arteries, hysterectomy are performed

Hematometer. There are cramping pains in the lower abdomen, amenorrhea. To clarify the diagnosis, ultrasonography is performed (with a vaginal probe). Treatment consists in evacuation of the uterine contents.

Infectious complications. Endometritis, exacerbation of chronic salpingo-oophoritis occur during prolonged operations, frequent repeated insertions and withdrawals of the hysteroscope. They are manifested by pain in the lower abdomen, fever, purulent discharge from the genital tract, which occurs most often 48-72 hours after surgery. It is important to find out if the complication is caused by thermal damage to the abdominal organs. Antibiotics are prescribed for treatment. Surgical treatment is required in rare cases, mostly in the case of tubo-ovarian abscesses.

Thromboembolic complications. In patients undergoing laparoscopic surgery and with additional risk factors for pulmonary embolism, thromboprophylaxis with the use of standard unfractionated heparin (UFH), low-molecular-weight heparin (LMWH), and mechanical methods is recommended. After major gynecological surgery, thromboprophylaxis is recommended for all patients. In patients with a high risk of venous thrombosis, mechanical prophylaxis and LMWH are prescribed. Patients undergoing major gynecological surgery are prophylactically treated until discharge from the hospital, and in case of particularly high risk, for another 2-4 weeks after discharge. In case of a high risk of thromboembolism, surgical treatment can be performed with the implantation of a temporary coffee filter**.**

Intrauterine synechiae are formed during expansive hysteroscopic operations with a large wound surface. Clinical manifestations of intrauterine synechiae include oligomenorrhea, uterine amenorrhea, and infertility. With the formation of confined spaces or stenosis of the cervical canal, hematometra occurs, accompanied by cyclical pain in the lower abdomen. In cases of infertility caused by intrauterine synechiae, hysteroscopic synechiolysis is performed. To eliminate hematoma, cervical canal dilation and hysteroscopy are performed. Prevention consists in the introduction of an intrauterine contraceptive into the uterine cavity as a protector and the prescription of estrogens.

3.Formation of professional skills and practical abilities.

1. A 46-year-old woman with dysfunctional uterine bleeding after a 2-week delay in menstruation is admitted to the gynecological department. What should you start treatment with?

2. A 34-year-old female patient was admitted to the gynecological department with complaints of acute right lower abdominal pain, which began acutely, nausea, vomiting. Bimanual examination: normal size uterus, its displacement is painful, the right ovary is slightly enlarged, rounded, painful. The vaginal vault is deep, palpation on the right is painful. In the mirrors: the cervix and vaginal mucosa are unchanged. There is no discharge.Which of the research methods is the most informative?

3. A 22-year-old woman visits an antenatal clinic because she is 11-12 weeks pregnant. The examination revealed a positive Wasserman reaction. The dermatologist diagnosed secondary latent syphilis. What is the tactic of management of this pregnancy?

4. A 17-year-old woman has acute pain in the lower abdomen. She notes a delay in menstruation for 2 weeks. She has been sexually active for a year. She was protected from pregnancy by interrupted sexual intercourse. Objectively: pale. Body temperature 36.60C, blood pressure 95/60 mm Hg, pulse 90 beats/min. Bimanual examination reveals a slightly enlarged uterus, cervical excursions are painful, the appendages are not clearly contoured, and the posterior vault is protruded. Discharge from the genital tract is dark bloody and scanty. The most informative method?

5.A 25-year-old female patient complains of pain in the right hypochondrium for 10-12 days. Menstrual delay of 7-8 weeks. On palpation, pain in the right hypochondrium. Gynecological examination: the uterus and ovaries are not enlarged, tenderness in the right vaginal vault. Discharge from the genital tract is mucous. Optimal method of investigation?

6. A 23-year-old patient underwent hysterosalpingography for primary infertility. On the radiograph: the uterine cavity is T-shaped, the fallopian tubes are shortened, rigid, with club-shaped dilatations in the ampullary sections; no contrast medium is observed in the abdominal cavity. Which disease is most characterized by such changes?

TOPIC 5
" Curation of a gynaecological patient. "

Purpose: to learn to take the patient's complaints, medical history, life history, information about the patient's general condition and appearance, examine the condition of the cardiovascular system, respiratory organs, the condition of the organs of the abdominal cavity, the musculoskeletal system, the nervous system, the condition of the genitourinary system systems. Identify from complaints, medical history, data of subjective, objective and special examination methods the signs and features needed to establish the final diagnosis, evaluate them.

Basic concepts (list of questions): general blood analysis. General analysis of urine. Blood hormones. Coagulogram. Amplification methods for infectious diseases (PCR, LLR). Microbiological research of biological fluids and secretions. Methods of instrumental visualization of abdominal organs. Methods of instrumental visualization of the genitourinary system (MSG, ultrasound). Methods of instrumental visualization of the skull. Methods of instrumental visualization of the breast. Cytological examination of the cervix. Histomorphological study of biopsy of mucous membranes. Establishing a preliminary and clinical diagnosis of the disease. Preparation of educational medical history.

Basic concepts for the lesson:

1. Anatomy and physiology of female genital organs.
2. Specific functions of the female body . Regulation of the menstrual cycle.
3. Peculiarities of taking an anamnesis from a gynecological patient.
4. Special methods of examination of gynecological patients.
5. Mechanisms of action of drugs that can be used for gynecological diseases.
6. Differential diagnosis of gynecological diseases.

Plan:

1.Knowledge control.

1. A 40-year-old woman came to the women's consultation with complaints of menstrual cycle disorders of the hyperpolymenorrhea type for six months, pulling pains in the lower abdomen, weakness. During the gynecological examination, the body of the uterus is enlarged up to 12 weeks of pregnancy, dense, mobile, painless. In the blood: Hb - 90 g/l. What pathology can be assumed?

A. +Myoma of the uterus
B. Cancer of the uterine body
C. Pregnancy
D. Cystoma of the ovary
E. Abnormal uterine bleeding

2. The patient complains of pain in the lower abdomen, which intensifies during menstruation and sexual intercourse, and radiates into the vagina. During the vaginal examination, dense, nodular, painful formations are found behind the uterus. What is the most likely diagnosis?

A. +Retrocervical endometriosis
B. Adenomyosis
C. Perimetritis
D. Chronic inflammation of the appendages of the uterus
E. Parametric

2.Discussion of theoretical questions.

SCHEME OF HISTORY DISEASES
GYNECOLOGICAL DISEASE

Patient (Surname named after 'I and paternal)

_____

Clinical diagnosis (*established within the first three days after the patient's hospitalization in a medical institution)*_ _____

Associated diseases _____

Curator _____
Faculty _____
Course_____ **Group** _____
Head of curation_____
Time of curation_____

PASSPORT PART

Surname, first name and patronymic name_____. Age_____. Marital status_____. Profession_____. Job_____. Home address _____. Date of hospitalization_____.

GRIEVANCE

The main complaints that brought the patient to the medical institution, as well as complaints in the present tense. Associated complaints.

ANAMNESIS DISEASE (anamnesis morbi).

When and how this disease began, how it developed; suddenly, or gradually, or were at the same time pain, their localization and character, bleeding, etc. How long were you in the hospital or at home in bed, what was the treatment for? How the disease progressed later, what and where it was treated, the results of treatment. If the disease is chronic, when was the last exacerbation.

ANAMNESIS LIFE (anamnesis vitae).

Conditions of birth , development, childhood. Diseases suffered in childhood and in subsequent periods of life - childhood diseases, chronic infectious diseases, malaria, typhus, tuberculosis, hepatitis, injuries, surgical interventions, blood transfusions. Frequent colds. Psychoemotional state. Does he currently take any medications and which ones?

Previous gynecological diseases, where and when they were treated, the effect of treatment. Family history: health status of parents (hereditary diseases), brothers, sisters - tuberculosis, venereal diseases, obesity, infertility, tumors of the reproductive system, developmental defects, pathology of the main body systems. Mental illnesses, malignant neoplasms, alcoholism. The man's state of health (parotitis, venereal diseases, sexually transmitted diseases, etc.).

Living conditions in childhood and now. Living conditions (environmental history): overcrowding, lighting, heating, humidity, general sanitary conditions. The state of the area (presence of harmful industries, irrigation fields, radioactive emitters, etc.).

Nutrition: quantity, quality, regularity of food intake.

Nature of work (hard physical work). Occupational hazards (organic solvents, work in hot shops, dusty rooms, radiation, vibration, etc.).

Harmful habits (smoking, alcoholism, drug addiction).

Allergological history: intolerance to drugs and other substances (industrial, household), food products.

Menstrual function

At what year of life did menstruation begin, or did it immediately stabilize. The nature of the menstrual cycle (the volume of blood loss, the presence of pain, the duration and regularity of menstruation. The nature of their changes after the beginning of sexual life , childbirth , abortions, etc. Contact bleeding. The time of the last normal menstruation.

Gender function

When did sex life begin? Is he married? In which marriage (by number) is there, how many time was in previous ones marriages How often changes sexual partners. Did the diseases appear after the beginning of sexual life. Features sexual life (pains during intercourse, bleeding during intercourse, when the last sexual intercourse was). Does she use contraceptives and which ones? How effective are they?

Childbearing function

As soon as I got pregnant after the start sex life How many times was she pregnant, with what intervals of time between pregnancies. How many births were there: urgent, premature. How did they flow (if abnormal, how did it manifest itself). How many children are alive, when was the last birth. How many abortions were there: artificial, spontaneous, in what month of pregnancy. Were there complications after abortions, when was the last abortion.

Secretary A function

Or is white with whose time their noticed them nature (color, consistence, scent) and quantity Does it irritate the external genitalia and the skin of the thighs and buttocks.

OBJECTIVE STATE OF THE PATIENT AT THE PRESENT TIME
(Status praesens objectivus)

General review the patient The patient's position (active, passive), consciousness, temperature, blood pressure pressure, pulse, mucous membranes, tongue. Height. Weight. Building bodies Food. Tongue.

The condition of the skin and integuments. The nature of hair growth. Hair growth in atypical places for a woman (on the hips, white line of the abdomen, chin, peri-nipple area); the time of its appearance (before or after the first menstruation). Skin condition (swelling, itching, rash, presence of acne, increased humidity). the presence of stretch marks, their color, location, time of appearance. Subcutaneous layer (turgor).

Thyroid. Lymphatic system (palpation of lymph nodes). Musculoskeletal system. Chest. The condition of the heart and circulatory system (blood pressure, heart

pain, palpitations, edema). Respiratory organs (breathing, cough, shortness of breath, chest pain).

Neurological status (mood, memory, sleep, attention, headache, or change in sensitivity). Sight, taste, hearing, smell.

Palpation of the mammary glands (presence of tumor-like formations, discharge from the nipples, their color).

Digestive organs: appetite, thirst; pains, dry mouth, salivation, hall. mouth Dyspeptic phenomena, heartburn, belching, bitterness in the mouth, nausea, vomiting. His stomach. Changes in the volume of the abdomen during the illness: gas, grunting. Stool (frequency, character, pain, tenesmus).

Urinary function, urination is free, painless, frequency. Pasternacki's symptom.

Stomach.

Its shape (convex, sunken, pigmentation of the white line, state of the anterior abdominal wall (turgor), participation in the act of breathing. Percussion of the abdomen. Palpation of the abdomen (tension of the muscles of the anterior abdominal wall). Data of deep palpation. Liver, stomach, intestine, spleen If there is a tumor, determine its boundaries, mobility, size, shape, surface character, consistency and tenderness. Symptoms of abdominal irritation. Abdominal auscultation.

Genitals.

Examination of the external genitalia. The nature and type of hair on the external genitalia. Pubic hair (shape, nature and type of hair, condition of the subcutaneous fat layer). The inner surface of the thighs (the presence of hyperemia, pigmentation. Description of the external genitalia: large and are small sexual lips - size, presence of hyperemia, pigmentation, varicose veins, condylomas, ulcers, swelling, condition of the mucous membrane (dryness, paleness). Clitoris (size). Perineum (presence of old tears, scars). Genital fissure (condition, degree of closure). Vaginal hair with glands - condition of Bartholin's glands, external opening of the urethra (presence of polyps, hyperemia). Hymen is integrity.

Examination in mirrors: vagina (folding, condition of the mucous membrane, presence of edema, neoplasms). The vaginal part of the cervix (shape, size, color of the mucous membrane, the presence of precancerous diseases, if so - their color and nature). The external eye of the cervical canal (color of the mucous membrane, shape, condition). The nature of secretions (color, quantity, smell) from the cervical canal and vagina.

When examining in mirrors, pH-metry of the contents of the vagina is performed, material is taken to determine the degree of cleanliness of the vagina, cytological, bacteriological and bacterioscopic studies are carried out. If necessary, functional diagnostic tests of the hormonal function of the ovaries are performed.

Vaginal examination: length, width of the vagina, condition of the perineum, muscles of the pelvic floor, mobility of the mucous membrane. The condition of the vaults of the vagina (depth, soreness). Cervix (shape, consistency, degree of mobility, degree of sensitivity).

Bimanual examination (abdominal-vaginal):

Uterus (position, size, degree of mobility, sensitivity, consistency). Fallopian tubes are thin and soft in the absence of pathological changes, normally they are not palpable. Ovaries (shape, size, pain). Ligaments of the uterus (consistency, soreness,

infiltration). Cervical tissue (condition – soft, does not limit the mobility of the uterus, degree of sensitivity).

A rectal-abdominal examination is performed for girls, if a detailed examination of the pelvic organs is necessary for women (when a tumor-like process is suspected or when it is ascertained to determine the stage), as well as in inflammatory processes to determine the degree of infiltration of the sacro-uterine ligaments and pararectal tissue, in case of atresia and vaginal stenosis. If necessary - and it arises when there is a suspicion of the presence of pathological processes in the wall of the vagina, rectum or rectal-vaginal membrane - conducting a rectal -vaginal examination.

Data of laboratory, instrumental and other special research methods.

The data of research methods are extracted from the medical history and analyzed.

Preliminary diagnosis.

Brief conclusions of objective research. The diagnosis is written concisely and can be generalizing.

Differential diagnosis

If it is necessary to differentiate this disease from other pathologies that have it in common, the elements of similarity are first indicated, then a description of the differentiating form is given, and only after that the conclusion of its low probability in this case is described.

Plan for additional research

A plan of additional research methods is drawn up, which, in the opinion of the student of higher education, must be carried out for clarification or making a final diagnosis.

Final diagnosis

The diagnosis should be detailed. This means that all pathological changes detected in the patient should be reflected in it.

Treatment

Treatment is covered in two ways: the general principles of treatment the disease and treatment that should be carried out for this patient in the clinic. The main dosage forms are recorded in recipes _ If an operative intervention was performed, the operation is described. For physiotherapeutic treatment - single and course doses.

Histological and other studies of organs and their parts removed during surgery.

Diary

(a detailed daily description of the patient's condition for 3 days)

Preventive instructions

The instructions should contain data on recommended living conditions, work, diet and medication.

The result of the disease. Forecast.

The prognosis is written "for recovery", "for life", "for work capacity". If the patient's work capacity is limited due to the disease, then the expected group of disability and employment measures are indicated. Dispensary

observation.

Epicris

The main complaints, anamnesis data, objective condition, dynamics of the disease are briefly described. Basic laboratory and instrumental research. Justification of the diagnosis. The therapy was carried out. Treatment outcomes (recovery, improvement, no change, deterioration, death). Loss of working capacity (restored, lost, reduced).

Used Books

Date Signature curate

3.Formation of professional skills and practical abilities.

1. A 27-year-old woman complains of irregular menstruation with delays of up to 2-3 months , a significant increase in body weight , and obesity . Married for 5 years , there were no pregnancies . During the vaginal examination , the uterus is slightly smaller than normal, on both sides, dense , mobile ovaries up to 4 mm 5 смin diameter are detected . What pathology can be thought of in this case?

2. A 49-year-old woman complains of a headache , " hot flushes" to the head, neck, increased sweating , palpitations , and an increase in blood pressure up to 170/100 mm Hg , blood pressure , insomnia , tearfulness , memory loss , rare menstrual periods , weight gain during 5 кгthe last six months. What is the most common diagnosis ?

A 29-year-old female patient turned to her colleague with complaints of dizziness , indigestion , tearfulness , headache , nausea , and sometimes vomiting, pain in the region of the heart . attacks of tach and cardia , loss of memory , flatulence . These complaints appear 6 days before menstruation and disappear the day before or in the first two days. Vaginal: uterus and appendages without changes. What is the most likely diagnosis?

4.Summing KPI

List of recommended literature:

Main:

1. Obstetrics and gynecology: in 2 books. – Book 2. Gynecology: a textbook (III-IV university) / edited by V.I. Hryshchenko, M.O. Shcherbyny , B.M. Ventskivskyi - 3 - there is ed., ex., 20 20 . - 376 p.
2. Clinical Obstetrics and Gynaecology: 4th Edition / Brian A. Magowan, Philip Owen, Andrew Thomson. - 2021. - 454 p.
3. Family planning and contraception: study guide / V.I. Boyko, N.V. Kalashnyk, A.V. Boyko and others; in general ed. Dr. Med. Sciences, Prof. V.I. A fight – Sumy: Sumy State University, 2018. – 223 p.
4. Obstetrics and Gynecology: in 2 volumes. Volume 2. Gynecology: textbook/ VI Gryshchenko, MO Shcherbina, BM Ventskivskyi et al. — 3rd edition, 2022. – 360 r .

5. Comprehensive Gynecology - 8 th Ed. / DM Hershenson, GM Lentz, FA Valea et al. Elsevier. 2021 - 881 p.
6. Pragmatic obstetrics and gynecology [Text]: [manual] / LB Markin [et al.]. - Lviv: Lviv Nat. Danylo Halytsky Med. Univ., 2021. - 236 p.
7. Oxford Textbook of Obstetrics and Gynecology / Ed. by S. Arulkumaran, W. Ledger, L. Denny, S. Doumouchtsis. - Oxford University Press, 2020 - 928

Additional:

1. Endoscopic surgery: training. manual / V.M. Zaporozhan, V.V. Grubnik, Yu.V. Grubnik, A.V. Malinovsky and others; under the editorship V.M. Zaporozhana, V.V. Grubnika - K.: VSV "Medicine", 2019. - 592 p.
2. 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.
3. Zaporozhan V.M. Simulation medicine. Experience. Acquisition Prospects: practice. advisor / V.M. Zaporozhian, O.O. Tarabrin – Sumy: University. Book, 2018. – 240 p.
4. Gynecology: a guide for doctors / V.K. Likhachev. – Vinnytsia: Nova Kniga, 2018. - 688 p.
5. Family planning. Educational and methodological manual / N.G. Hoyda, O.V. Hryshchenko, V.P. Kvashenko, O.V. Kravchenko et al. / Kyiv, 2016. – 444 p.
6. Infertility in marriage: study. study guide higher honey. education closing III-I V yr. acre. - Kh.: Khnist National Medical University, 2014. - 126 p.
7. Reproductive function in women with uterine fibroids and endometriosis / N.M. Rozhkovska, D.M. Zhelezov, T.V. Kossei // Women's health - 2018. - #2. - P.5-7.
8. Ovarian reserve during surgical treatment of ovarian endometrioma / A.H. Volyanska, L.M. Popova, T.P. Todorova, O.P. Rogachevskyi, O.I. Shevchenko // All-Ukrainian scientific and practical conference with international participation "Innovative technologies in obstetrics and gynecology: from science to practice" - Ivano-Frankivsk, 2019. - P. 12-13.
9. The influence of surgical energies on the ovarian reserve during endoscopic treatment of ovarian endometriosis / T.P. Todorova // Scientific and practical conference with international participation dedicated to the 150th anniversary of the birth of V.V. Voronov "Modern theoretical and practical aspects of clinical medicine" - Odessa, 2020. - p. 118.
10. Situational problems in gynecology: teaching. manual/ I.Z. Gladchuk, A.H. Volyanska, G.B. Shcherbina and others; under the editorship of Prof. FROM. Gladchuk - Vinnytsia: "Nilan-LTD" LLC, 2018. - 164 p.
11. Williams Gynecology, 4th Edition by Barbara Hoffman, John Schorge et al&. - Mac Grow Hill Education. - 2020 . – 1328
12. Oats , Jeremy Fundamentals of Obstetrics and Gynecology [Text]: Liewellyn - Jones Fundamentals of Obstetrics and Gynecology / J. Oats, S. Abraham. – 10 th ed. – Edinburgh [etc.]: Elsevier, 2017. – VII, 375 p.

13. Dutta , Durlav Chandra. DC Dutta's Textbook of Gynecology including Contraception / DC Dutta; ed/ Hiralal Konar. - 7th ed . - New Delhi: Jaypee Brothers Medical Publishers, 2016. - XX, 574 p.
14. Current "Clinical protocols", approved by order of the Ministry of Health of Ukraine for Obstetrics and Gynecology.

Electronic information resources:

1. https://www.cochrane.org/ - Cochrane / Cochrane Library
2. https://www.acog.org/ - American Association obstetricians and Gynecologists / The American College of Obstetricians and Gynecologists
3. https://www.uptodate.com – UpToDate
4. https://online.lexi.com/ - Wulters Kluwer Health
5. https://www.ncbi.nlm.nih.gov/ - National center biotechnological of information / National Center for Biotechnology Information
6. https://pubmed.ncbi.nlm.nih.gov/ - International medical library / National Library of Medicine
7. https://www.thelancet.com/ - The Lancet
8. https://www.rcog.org.uk/ - Korolevska Association obstetricians and gynecologists / Royal College of Obstetricians & Gynaecologists
9. https://www.npwh.org/ - Practitioners nurses with protection I 'm healthy women / Nurse practitioners in women's health
10. http://moz.gov.ua – Ministry of Health of Ukraine
11. www.ama-assn.org - American medical association / American Medical Association
12. www.who.int - World Health Organization
13. www.dec.gov.ua/mtd/home/ - State Expert Center of the Ministry of Health of Ukraine
14. http://bma.org.uk - British Medical Association
15. www.gmc-uk.org - *General Medical Council (GMC)*
16. www.bundesaerztekammer.de – German Medical Association
17. www.euro.who.int - European Regional Office of the World Health Organization.