

**MINISTRY OF HEALTH OF UKRAINE  
ZAPORIZHZHIA STATE MEDICAL UNIVERSITY  
Department of Obstetrics and Gynecology**

**DISEASES OF THE WOMEN'S REPRODUCTIVE SYSTEM.  
FAMILY PLANNING**

**SECTION 1**

**Practicum  
for students of the IV year of medical faculties of specialties "General  
Medicine", "Pediatrics"**

**Zaporizhzhia  
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*Approved by the Central Methodological Council of Zaporizhzhia State Medical University and recommended for use in the educational process.*

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The practicum is designed for the training: specialists of the second (master) level of higher education in the field of knowledge 22 "Health care" at the institutions of higher education of the Ministry of Health of Ukraine in the specialty 222 "Medicine", qualifications of the educational "Master of Medicine", professional qualification "Doctor"

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Acute abdomen syndrome in gynecology .....

Infertile marriage. ....

Family Planning .....

Curation of patients, preparation of educational case history. Defence of the case history. Test control .....

## **PREFACE**

The practicum was created in accordance with the approved work program for the training of specialists of the second (magister's) level of higher education in the field of knowledge 22 "Health" at the Department of Obstetrics and Gynecology of Zaporizhzhya State Medical University in order to improve the methodological component of teaching Section 1. Diseases of the women's reproductive system. Family planning.

Using the Practicum will help to systematize the method of preparing students for each practical lesson of this section, to focus on the study of the the fundamental questions and practical skills that students should master during the cycle. In this practicum there are basic types of test tasks and situational tasks, which will allow to check the level of preparation of students for the practical classes and additionally prepares students for passing licensing exams. A separate sections for each practical session in the Practicum provides a list of basic and additional educational literature that is recommended for study.

# **CLINICAL ANATOMY AND PHYSIOLOGY OF FEMALE GENITALIA. METHODS OF EXAMINATION OF GYNECOLOGICAL PATIENTS. GENERAL SYMPTOMATOLOGY IN GYNECOLOGY. REPRODUCTIVE SYSTEM DISORDERS. NEUROENDOCRINE SYNDROMES IN GYNECOLOGY**

## **I. SCIENTIFIC-METHODOLOGICAL THEMATIC JUSTIFICATION (TOPICALITY):**

Gynecology is the science about woman who studies the normal activity of the female body, diseases associated with the characteristics of the female body in different periods of her life.

The knowledge gained during the study of the course of normal and pathological anatomy, histology, normal and pathological physiology is a very important basis for advanced professional development of the gynecological topics, devoted to the physiology of female genitalorgans and obtaining primary practical skills about modern methods examination and treatment. It is the knowledge of the questions of the construction of the external and internal genital organs, the physiology of the menstrual cycle allows substantiate the feasibility of a detailed study of disorders of the female reproductive function, as a basic issue in understanding the etiopathogenesis, diagnosis and treatment of most gynecological diseases.

The teacherpays great attention to the collection of gynecological medical history. Different gynecological pathologies can have very similar symptoms, so no matter what the pathology, women's complaints will often be identical. The main gynecological complaints are: pathological discharge from the genital tract, pain, uterine bleeding, disturbancefunction of next organs, impaired sexual and reproductive function, itching of the external genitalia. When considering major complaints, the teacherdraws attention to a variety of etiological causes.

When collecting the medical history, the main functions are revealed: secretory, menstrual, sexual, reproductive, a interview is conducted regarding data on the status of other organs and systems of women.

For the logicalcombination of information about the anatomy, physiology of the female genital organs, as well as facilitating the work on the development of this topic should clarify the issues of regulation of menstrual function, pay attention to the levels of regulation, synchronous interaction, biosynthesis and metabolism of hormones, their effect on the study of organs and targets between menstrual, generative functions and other organs and systems of women.

During the collection of gynecological anamnesis, the teacherpays great attention to the characteristics of menstrual function, the risk factors for the development of its

disorders, both intrauterine and postnatal. The main complaints are: decrease or vice versa increase in the amount of lost blood, changes in cycle duration, lack of menstruation. When considering major complaints, the teacher draws attention to a variety of etiological causes.

Involving students to work on the phantom helps to study special gynecological research (examination of the external genitals, speculum examination, vaginal, bimanual, rectal examination), while determining the location, size, shape, consistency, mobility of the cervix, body and appendages of the uterus, it is necessary to emphasize the importance of these concepts to determine abnormalities and various gynecological diseases.

Starting to study special methods of research, it is necessary to indicate their importance in diagnosis. Additional methods include: smear testing for bacterioscopic and cytomorphological examination, functional diagnostics tests, determination of blood hormone levels, ultrasound diagnosis, uterine probes, cervical and endometrial biopsy, hystero- and laparoscopy, skull X-ray, and MRI.

The clinical example teacher demonstrates the use of special examination methods that allow in each case to specify and determine the etiology, the level of damage and the form of menstrual disorders.

When studying the principles of treatment of disorders of the menstrual cycle, it is necessary to mention medicines that affect the contractile capacity of the myometrium, which increase erythropoiesis and increase blood clotting; as well as hormonal preparations of different structure, their synthetic analogues.

Particular attention is paid to the supervision of gynecological patients with menstrual disorders, complaints collection, medical history, special study, additional examination methods, with subsequent examination of patients.

## II. Educational goals of the lesson

### 2.1 The student should know ( $\alpha$ -II):

- features of anamnesis collection in gynecological patients (complaints, heredity, postponed general and gynecological diseases, working conditions, menstrual, sexual, reproductive function);
- general methods of investigation of gynecological patients (type of constitution, nature of distribution of adipose tissue, hair, sexual development formula, condition of internal organs);
- special examination of the pelvic organs (examination of the external genitals, examination of the cervix with the help of speculum, vaginal, bimanual, rectal, recto-abdominal examination);
- instrumental research methods (colpocytology, chromodiagnostics, biopsy, cytological diagnostics, cytological examination of aspirate from the uterine cavity,

fractional diagnostic scraping of the mucous membrane from the uterine cavity, hysteresectoscopy, puncture, puncture, puncture;

- X-ray examination of the pelvic organs (hystero-graphy, intrauterine phlebography, hysterosalpingography, lymphography, radiography of the skull and the Turkish saddle);
- ultrasound diagnostics in gynecological practice;
- endoscopic examination methods (hysteroscopy, laparoscopy);
- gynecological documentation;
- gynecological terminology;
- terms that characterize menstrual disorders, including the definition of abnormal uterine bleeding (AMC), the definition of amenorrhea;
- etiology of abnormal uterine bleeding and amenorrhea;
- pathogenesis of abnormal uterine bleeding and amenorrhea;
- classification of abnormal uterine bleeding and amenorrhea;
- basic methods of diagnosis of abnormal uterine bleeding and amenorrhea;
- goals and methods of treatment of abnormal uterine bleeding and amenorrhea;
- ways of primary prevention of menstrual disorders;
- basic medicines for the treatment of menstrual disorders.

## 2.2 The student must be able to ( $\alpha$ -III)

To master the skills:

- collection of general and special gynecological anamnesis;
- carrying out examination of the patient, providing an assessment of the physique, determining the formula of sexual development, body mass index, conducting an assessment of hair growth;
- conducting a special gynecological examination;
- taking smears on the degree of purity of the vagina, colpocytological and oncocytological examination;
- evaluation of ultrasound data; evaluate radiographs (CT results) of the uterus and fallopian tubes.

To master the technique of conducting:

- special (external and internal) gynecological examination;
- taking smears from the genital tract for bacterioscopic, colpocytological and oncocytological examination.

To master the skills:

- drawing up a sound plan for managing gynecological patients.
- master basic diagnostic tests that will help to find out the nature of menstrual dysfunction (basal thermograms, "pupil phenomenon", degree of estrogenic

saturation on the colpocytological picture, symptom of crystallization of cervical mucus).

- Learn how to perform differential diagnosis and make a clinical diagnosis.
- master the basic types of treatment of patients with menstrual dysfunction.
- correctly present the data obtained in the medical history or outpatient card;
- evaluate the results of clinical and hormonal examination for menstrual disorders.

Demonstrate:

- on the phantom the methodology of special gynecological examination;
- on the phantom, a technique for taking material for bacterioscopic and cytomorphological examination from the vagina and cervix.

### III. PERSONAL DEVELOPMENT GOALS

#### (EDUCATIONAL PURPOSE)

To educate students about the importance of knowledge of anatomy, histology, physiology of the female reproductive system, the role of the CNS in its regulation, menstrual cycle, biosynthesis and metabolism of steroid hormones and interest them in the detailed material studied. Deepen understanding of deontology and medical ethics, develop a sense of professional responsibility for one's own actions and the fate of the patient. Master the ability to make psychological contact with a patient. In order to strengthen self-awareness, to focus on the contribution of domestic and foreign scientists to the study of modern methods of diagnosis and treatment used in gynecological practice.

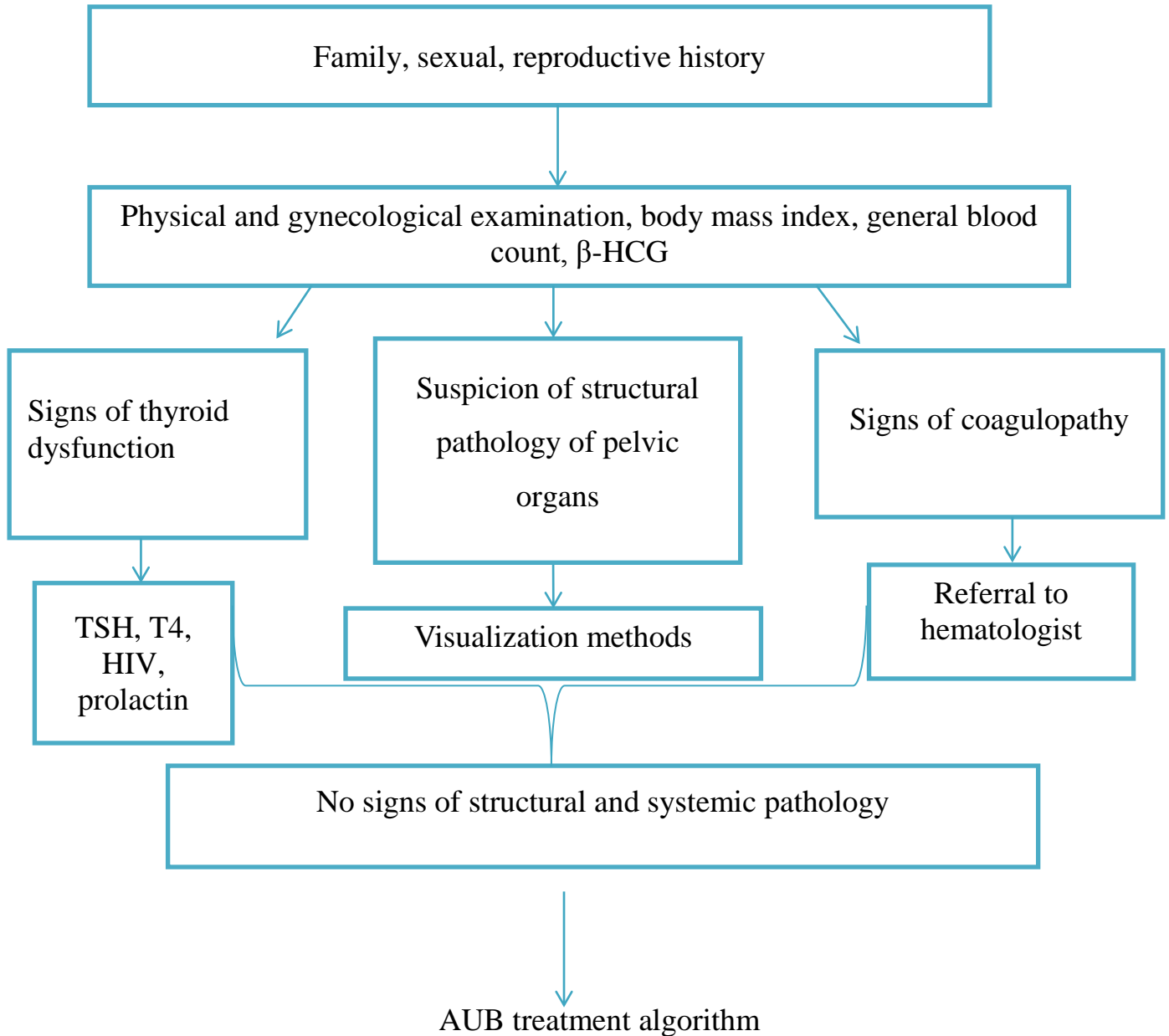


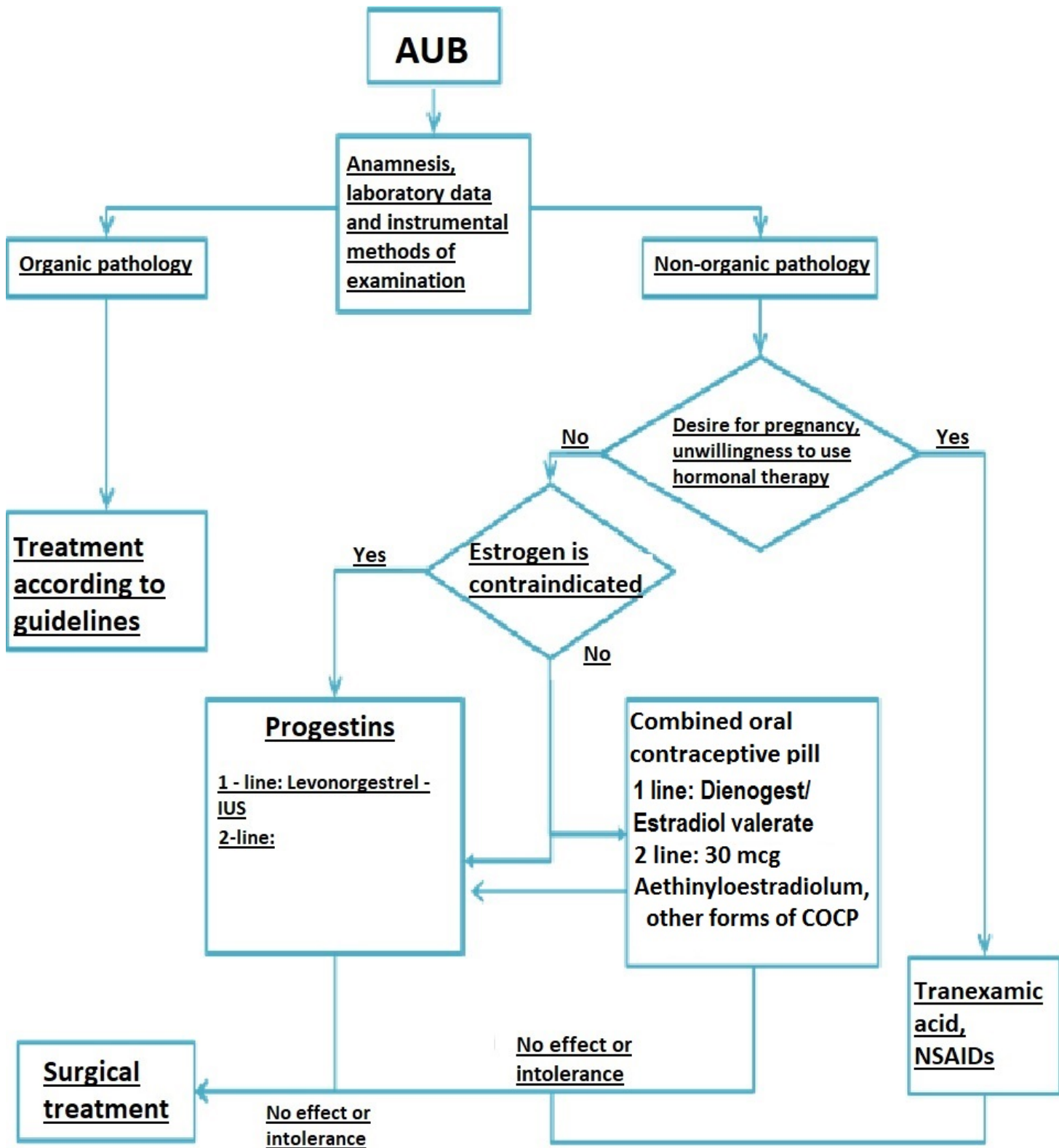
#### **IV. INTERDISCIPLINARY INTEGRATION**

<b>Discipline / topics</b>	<b>Know</b>	<b>Be able</b>
<b>I. Previous disciplines (providing):</b>		
History of medicine	- contribution of domestic and foreign scientists to the issue of diagnosis and treatment of female genital organs	
Human anatomy and topographic anatomy	- structure of external and internal genital organs	
Normal and pathological physiology	- the basics of hormonal regulation of the female body - highlights of the etiopathogenesis of amenorrhea and disorders of menstrual function;	
<b>II. The following disciplines (which ensure the acquisition of knowledge):</b>		
Clinical pharmacology	- pharmacokinetics of hormonal agents used in the treatment of amenorrhea and abnormal uterine bleeding	- to diagnose possible complications of the postoperative period
Surgery	- Possible complications arising from surgery for women with abnormal uterine bleeding	
<b>III. Intra-curricular integration:</b>		

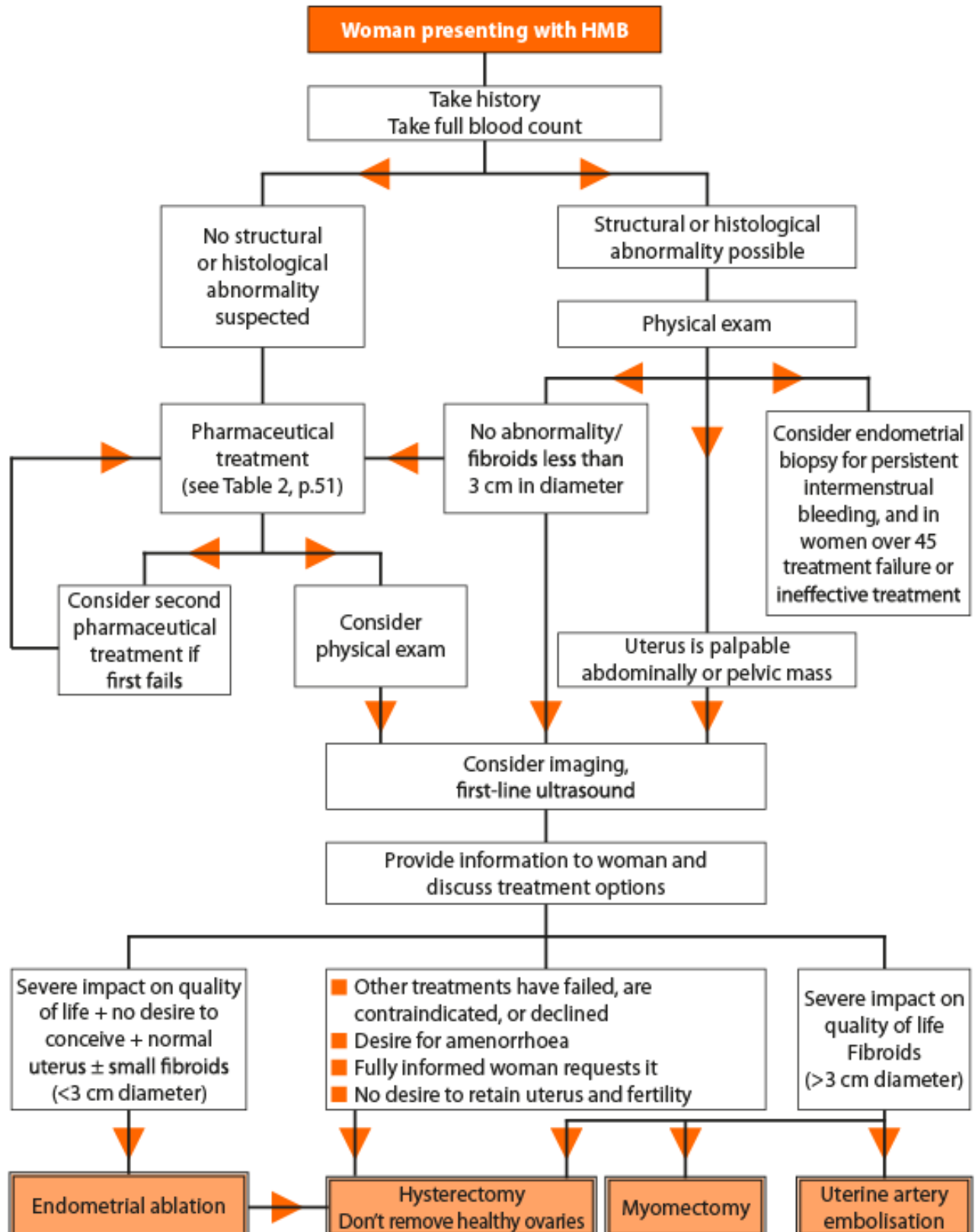
Differential diagnosis of various disorders of the function of the female reproductive system	- classification of abnormal uterine bleeding - classification of amenorrhea	- by means of the given classification to specify criteria of differential diagnostics of various disturbances of function of a female reproductive system
Principles of examination of women with disorders of the female reproductive system	- algorithm for examination of women with disorders of the female reproductive system	- to demonstrate the methodology of external and internal gynecological examination
Ultrasound in the diagnosis of abnormal uterine bleeding	- the main criteria for ultrasound diagnostics	- to demonstrate the possibilities of ultrasound examination in the office of functional diagnostics
Hysteroscopy as a method of diagnosis and treatment of various disorders of the female reproductive system	-main indications for hysteroscopic intervention	- to demonstrate the main steps in the hysteroscopic examination

**V. TABLE OF CONTENTS OF LESSON:  
STRUCTURAL-LOGICAL SCHEME OF LESSON  
Diagnostic algorithm for examination of a patient with AUB**





# Management of heavy menstrual bleeding



**Classification of causes of abnormal uterine bleeding (PALM \ COEIN)**

<b>Structural PALM</b>	<b>Non-structural COEIN</b>
<b>P - polyps</b>	<b>C - coagulopathy</b>
<b>A - adenomyosis</b>	<b>O - ovulation disorders</b>
<b>L - leiomyoma</b>	<b>E - endometrial pathology</b>
<b>M - malignant tumors, hyperplasia</b>	<b>I - iatrogenic</b>
	<b>N - unclassified</b>

**VI. PLAN AND ORGANIZATIONAL STRUCTURE OF THE EMPLOYMENT:**

№ p / n	The main stages of the lesson, their functions and content	Levels of learning	Methods of control and training	Methodological support materials	Time min.
<b>I. Preparatory stage</b>					
1.				Magazine Methodical developments Questions for individual oral questioning; Level II test tasks; typical level II tasks themed tables, posters, models, slides.	
2.					
3.	Organization of classes Setting learning goals and motivation Control of the initial level of knowledge, skills, abilities: 1. Causes that contribute to the	II α	Individual oral survey. Test control Level II. Solution of typical level II problems.		

	<p>violation of the function of the reproductive system.</p> <p>2. Classification of abnormal uterine bleeding and amenorrhea.</p> <p>3. Modern possibilities of diagnostics of disorders of function of reproductive system.</p> <p>4. Tactics of managing patients with abnormal uterine bleeding and various forms of amenorrhea.</p> <p>5. Indications and types of surgical treatment of abnormal uterine bleeding and amenorrhea.</p>				
<b>II. The main stage</b>					
4.	<p>Formation of professional skills and competences:</p> <p>1. Working in the gynecological department.</p> <p>2. Master the methods of anamnesis, external and internal gynecological examination.</p> <p>3. Supervise patients with abnormal uterine bleeding and other disorders of the reproductive system.</p>	<p>III α</p> <p>III α</p> <p>III α</p>	<p>Practical training</p> <p>Professional training in solving atypical clinical situations</p>	<p>Algorithms for the formation of practical skills.</p> <p>Gynecological instruments, ultrasound and colposcope for examination of patients. Phantoms. Models.</p> <p>Algorithms for the formation of professional skills and competences.</p>	

	<p>4. To evaluate and interpret the results of ultrasound and pathohistological examination.</p> <p>5. Differential diagnosis of different types of abnormal uterine bleeding or different types of amenorrhea.</p> <p>6. Make a diagnosis according to clinical and instrumental examinations.</p> <p>Identify and justify the management of patients with abnormal uterine bleeding and other disorders of the reproductive system.</p>			<p>Patients (gynecologic patients). Illnesses.</p> <p>Situational atypical level III tasks.</p>	
<b>III. The final stage</b>					
5.	<p>Level control and correction professional skills.</p>		<p>Individual control practical skills and their results.</p> <p>Analysis and evaluation results clinical work.</p> <p>Testing control III equal.</p> <p>Solution atypical tasks Level III.</p>	<p>Gynecological tools.</p> <p>Results clinical examination.</p> <p>Test tasks Level III.</p> <p>Atypical tasks III equal.</p>	
6.	<p>Summary of the lesson.</p>				



7.	Homework.			Indicative map for independent work with literature	
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## VII. MATERIALS OF METHODOLOGICAL ENSURING:

### 1.1. Control materials for the preparatory stage of the lesson.

Theoretical basics of mastering the topic:

1. Define abnormal uterine bleeding?
2. What are the most significant risk factors for abnormal uterine bleeding?
3. What is the clinical classification of abnormal uterine bleeding?
4. Classification of abnormal uterine bleeding according to the system of determining the cause of occurrence (PALM - COEIN).
5. Modern methods of diagnosis of abnormal uterine bleeding.
6. Modern approaches to the treatment of abnormal uterine bleeding.
7. Define amenorrhea?
8. Causes of different types of amenorrhea
9. What is the classification of amenorrhea?
10. Modern methods of diagnostics of different types of amenorrhea.
11. Intra-syndromic differential diagnosis of different types of amenorrhea.
12. Modern approaches to the treatment of different types of amenorrhea.

### Test Control Materials (II $\alpha$ )

#### A. Multiple Choice Test:

Choose the mandatory gynecological examination methods:

1. patient survey;
2. study of the function of neighboring bodies;
3. external gynecological examination;
4. bacterioscopic analysis of discharge from 3 points (vagina, cervical canal, urethra);
5. cytomorphological examination of the vagina and vaginal part of the cervix;
6. pathohistological examination of the mucous membrane of the uterine cavity;
7. special gynecological examination;
8. ultrasound examination of the pelvic organs;
9. Computed tomography of the pelvic organs;
10. Kolpochevoscopic examination.

#### B. Test for drawing parallels, establishing logical connections between data groups:

What are the main functions of the female body?

1. secretory
2. menstrual
3. Sex
4. reproductive

B. Addition Test:

1. Specify according to the classification of causes of abnormal uterine bleeding (PALM \ COEIN)

A. Structural:

- 1 . \_\_\_\_\_
- 2 . \_\_\_\_\_
- 3 . \_\_\_\_\_
- 4 . \_\_\_\_\_

B. Non-structural:

- 1 . \_\_\_\_\_
- 2 . \_\_\_\_\_
- 3 . \_\_\_\_\_
- 4 . \_\_\_\_\_
- 5 . \_\_\_\_\_

1. List the medicines that can be used to treat acute abnormal uterine bleeding:

- 1 . \_\_\_\_\_
- 2 . \_\_\_\_\_
- 3 . \_\_\_\_\_

Typical Level II Tasks:

Task 1.

Patient R., 21 years old, went to the doctor complaining about the absence of menstruation within 7 months. Menstrual function: menstruation from 15 years, all the time are irregular in nature with a cycle duration of 32 to 56 days, scanty.

Question: What additional anamnestic data is needed to make a diagnosis? Make a plan for the examination of the patient to clarify the diagnosis.

Answer:

Task 2.

Patient 57 years old, went to the doctor complaining of pain in the lower abdomen and the appearance of moderate bleeding 8 years after the definitive cessation of menstruation.

Question: What special and additional examination methods should be performed in this patient to clarify the diagnosis?

Answer:

## 7.2 Materials of methodological support for the main stage of the lesson

№ p / p	Tasks	Sequence of implementation	Remarks, warnings about self-control
1.	Patient survey (history)	<p>Follow these steps:</p> <ol style="list-style-type: none"> <li>1. The main complaints</li> <li>2. Additional complaints</li> <li>3. Delayed somatic diseases and surgical interventions</li> <li>4. Menstrual, sexual and reproductive function, nature of contraception</li> <li>5. Gynecological diseases and genital surgery</li> <li>6. Family history</li> <li>7. History of the disease</li> </ol> <p>Follow these steps:</p> <p>Option of a physique of a woman</p> <p>The nature of the hair and the condition of the skin</p> <p>Breast examination</p> <p>Belly examination</p> <p>Palpation of the abdomen</p> <p>Percussion and auscultation of the abdomen</p>	<p>1. The patient should be in a comfortable position (sitting)</p> <p>When horizontal</p> <ol style="list-style-type: none"> <li>1. the position of the patient with large tumors of the pelvic organs is possible</li> <li>2. the occurrence of the syndrome</li> <li>3. aorto-forging</li> <li>4. compression.</li> <li>5.</li> <li>6. Emptied bladder and rectum.</li> </ol>
2.	Overview	<p>1) Follow these steps:</p> <p>2) 1) Give the patient a horizontal position</p> <p>3) 2) Review of external genitalia</p> <p>4) 3) Research using gynecological speculum</p> <p>5) Bimanual vaginal examination (abdominal-</p>	
3.	Gynecological Review	<p>5) Bimanual vaginal examination (abdominal-</p>	

<b>№ p / p</b>	<b>Tasks</b>	<b>Sequence of implementation</b>	<b>Remarks, warnings about self-control</b>
		rectal)	

### 7.3 Materials of control of the final stage of the class

#### Classification test

Specify the level of impression in various neuroendocrine syndromes

<b>Impression level</b> <b>Neuroendocrine syndrome</b>	<b>Genetic pathology</b>	<b>Hypothala mo- pituitary</b>	<b>Ovarian</b>	<b>Uterus</b>
Polycystic ovary syndrome				
Postpartum hypopituitarism (Sheehan syndrome)				
Itsenko-Cushing's disease				
Shereshevsky-Turner syndrome				
Rokitan-Kustner syndrome				
Chiari-Frommel syndrome				
Babinsky-Frehlich syndrome (adipozogenital dystrophy)				
Persistent galactorrhea- amenorrhea syndrome				

### Atypical Level III Task:

#### Problem.

Patient N., 28 years old, was admitted to the gynecological ward complaining of the absence of menstruation for 6 months, as well as monthly significant abdominal pain at about the same numbers. History of the disease: Considers himself ill after a medical abortion, which was performed in a hospital at 8 weeks gestation. The operation was complicated by a hematometer, repeated scraping of the mucous membrane of the uterine cavity. Menstruation of 13 years, established immediately, after 4 weeks for 3-4 days, moderate, painless. History of 2 normal births, 4 medaborts. In gynecological examination: the external genitals are formed correctly, the cervical mucosa is clean, pink in color, the outer owl is slit-shaped. Bimanual: The uterus is slightly enlarged, in the correct position, dense consistency, mobile, painless. The appendages are not palpable. Hysteroscopy was performed: synechiae were detected in the cervical canal and in the uterine cavity, aspiration of the contents of the uterine cavity was performed. The result of cytological examination of aspirate - endometrial cells in the phase of late proliferation. Tactics of patient management.

#### Answer:

7.4 Materials of methodological support of students 'self-preparation (indicative map for organizing students' independent work with educational literature)

№ p / p	Training tasks	Instructions to the task
1.	Explore: the most significant risk factors for abnormal uterine bleeding classification of abnormal uterine bleeding	Know the risk factors for abnormal uterine bleeding
2.	modern methods of diagnostics of abnormal uterine bleeding	To classify abnormal uterine bleeding
3.	current approaches to the treatment of abnormal uterine bleeding	To name modern methods of diagnostics of abnormal uterine bleeding
4.	causes of different types of amenorrhea	List modern approaches to the treatment of abnormal uterine bleeding
5.	classification of amenorrhea	Know the causes of different types of amenorrhea
6.	modern methods of diagnostics of different types of amenorrhea	Make a classification of amenorrhea
7.	modern approaches to the treatment of different types of amenorrhea.	To name modern methods of diagnostics of different types of amenorrhea
8.		Listed are modern approaches to the treatment of different types of amenorrhea.

## VIII. RECOMMENDED BOOKS

### Basic:

1. Obstetrics & gynecology : textbook / V. I. Gryshchenko [et al.] ; ed. by.: V. I. Gryshchenko, M. O. Shcherbina. - Kyiv : AUS Medicine Publ. - Vol. 2 : Gynecology. - 2nd ed. - 2018. - 352 p.
2. Obstetrics and Gynecology: Workshop / VK Likhachev [et al.]; Ministry of Health of Ukraine, Higher Educational Institution of Ukraine "Ukrainian Medical Dental Acad." - Poltava: Divosvit, 2014. - 200 p.
3. Gynecology: a textbook / ed. B.M. Wentkivsky, G.K. Stepankivska, M.E. Yarotsky. - K.: VSV Medicine, 2012. - 352 p.
4. Obstetrics and Gynecology: in 4 volumes: national textbook / no. ed. ; in a row. Academician of the National Academy of Medical Sciences of Ukraine, prof. V.M. It is blocked. - Vol. 3: Non-surgical gynecology. - K.: VSV "Medicine", 2014. - 928 p.
5. Gynecology: a guide for doctors / VK Likhachev. - Vinnytsia: New Book, 2018. - 688 p.

### Additionally:

1. Tatarchuk TF, Solsky YP Endocrine gynecology (clinical essays). - K. : Testament, 2003. - 304 p.
2. DeCherney A.H. Obstetrics and gynecology: diagnosis and treatment: a textbook for students of medical universities: in two volumes / A. H. DeCherney, L. Nathan; ed. AN Strizhakov; trans. with English. [M. A. Mayevsky, RV Parmenov]. - Moscow: MEDPress-Inform, 2008-2009.
3. Dubile P. Atlas on ultrasound diagnostics in obstetrics and gynecology / PM Dubile, KB Benson; trans. with English. ; under common. ed. V. E. Gazhonova. - 3rd ed. - M.: Medpress-inform, 2011. - 328 p.
4. Hart D. M.K. Gynecology: an illustrated clinical guide / D.M.K. Hart, D. Norman; trans. with English. [AND. Sokolov, etc.]; under common. ed. VN Prilepskoy. - Moscow: Binom, 2009. - 463 sec.
5. Outpatient care in gynecology / ed. V.A. Beniuk // Gynecologist doctor's guide. - 2nd ed., Suppl. - K. : Publishing House "Health of Ukraine", 2010. - 462 p. - (The series "Library" Health of Ukraine ).
6. Algorithms in Obstetrics and Gynecology / Ed. V.A. Benyuk // Doctor's Guide. - K. : Doctor-Media LLC, 2009. - 428 p. (Library series "Health of Ukraine").
7. A Guide to Practical Skills in Gynecology, Obstetrics and Neonatology / Ed. prof. AND I. Senchuk. - K. : Hydromax, 2006. - 368 p.
8. Order of the Ministry of Health of Ukraine No. 676 dated 31.12.2004 "On approval of clinicalobstetric and gynecological protocols.Benign tumors of female genital organs. Endometriosis

## **BENIGN TUMORS OF FEMALE GENITALS. ENDOMETRIOSIS**

### **I. SCIENTIFIC AND METHODOLOGICAL RATIONALE OF THE TOPIC (UPDATE):**

For the perfect development of this topic should clarify the issues of the structure of the uterus and ovaries, pay attention to their topography, blood supply, innervation. The consolidation of the obtained knowledge is carried out on the model.

The teacher pays special attention to the collection of gynecological anamnesis, the study of menstrual, sexual, childbearing functions, risk factors for uterine fibroids, benign ovarian tumors, endometriosis.

The main complaints that can manifest in the presence of benign tumors of the female genital organs and genital endometriosis: the violation of the menstrual cycle (profuse metrorrhagia for uterine fibroids and characteristic menorrhagia for endometriosis), pain (progressive subcutaneous myelomas) in the premenstrual period and during menstruation with internal genital endometriosis (adenomyosis), impaired function of adjacent organs, impaired sexual function, infertility. and the main complaints, the teacher draws attention to their diversity, depending on the localization of the pathological process (side localization cysts (cysts) ovarian localization of myoma nodes, endometrioid heterotopias).

Involving students to work on the phantom to study a special gynecological study (examination of the external genitalia, examination in gynecological speculum, vaginal, bimanual, rectal examination), while determining the location, size, shape, consistency, mobility of the uterine body and the formation of appendages of the uterus, the value of these concepts to determine possible tumorigenesis and diagnosis. When studying the special methods, pay attention to the special importance of this knowledge in the activity of the doctor in making the diagnosis. Additional methods include the determination of tumor markers, colposcopy, cytological examination of aspiration fluid, ultrasound diagnosis, CT, MRI, uterine sensing, hystero- and laparoscopy.

The teacher shows in clinical examples the use of special methods of examination, which in each case to determine the presence of neoplasms in the field of uterine appendages, to clarify and determine the localization of myomatous nodes and foci of endometriosis.

When considering the issues of conservative treatment of uterine fibroids and endometriosis, it is necessary to mention medicines that affect the contractile capacity of the myometrium, which increase erythropoiesis and increase blood clotting; as well as hormonal preparations of different structure, their synthetic substitutes.

Particular attention is paid to the curation of gynecological patients with ovarian tumors, uterine leiomyoma and endometriosis, complaint collection, medical history,



special examination, additional examination methods, with subsequent analysis of the patients being curated.

## II. LEARNING OBJECTIVES:

### 1.1 The student should know ( $\alpha$ -II):

- anatomical structure of external and internal genitals
- etiology, features of pathogenesis of uterine leiomyoma;
- modern classification of uterine leiomyoma with indication of types of myomatous nodes (according to ultrasound, Doppler examination);
- main symptoms and clinical picture at different localization of myomatous nodes;
- modern methods of diagnostics of uterine leiomyoma (basic, additional);
- basic principles and indications for drug therapy of uterine leiomyoma;
- indications and current possibilities of surgical and minimally invasive treatment of uterine leiomyoma (conservative myoectomy, uterine artery embolization).
- modern classification of benign ovarian tumors (according to the pathomorphological study);
- features of the pathogenesis of the development of various types of benign ovarian tumors;
- the main symptoms and clinical picture of various benign ovarian tumors;
- modern methods of diagnostics of uterine leiomyoma; principles of differential diagnosis of benign ovarian tumors with malignant ovarian tumors and tumors of other localization;
- basic principles of management of patients with functional (physiological) ovarian cysts;
- indications and current possibilities of surgical treatment of benign ovarian tumors;
- current approaches to the issues of endometriosis etiopathogenesis;
- modern classification of endometriosis;
- main symptoms and clinical picture of endometrioid heterotopias of different localization;
- modern methods of diagnosis of genital endometriosis (screening, diagnostic laparo- and hysteroscopy, ultrasound, MRI);
- basic principles and indications for drug therapy and surgical treatment of genital endometriosis;
- The main hormonal drugs used to treat genital endometriosis in modern gynecology.

### 1.2 The student must be able to ( $\alpha$ -III):

To master the skills:

- collection of general and special medical history;
- general examination of the patient;

- conducting a special gynecological examination;
- taking smears from the urethra, cervical canal, vagina, and rectum;
- bimanual (abdominal-vaginal examination);
- Based on the data of the special gynecological examination of the patient and the results of the additional examination, make the right diagnosis and choose the tactics of treatment.

### III. PURPOSE OF PERSONAL DEVELOPMENT (EDUCATIONAL OBJECTIVE):

To educate students on the importance of benign plump female genital mutilation and endometriosis. Pay particular attention to the risk of malignancy of tumors of the genital organs in violation of the principles of timeliness of their diagnosis and treatment; there is a significant decrease in women's social activity in the clinical manifestation of genital endometriosis, which has a sufficiently high percentage of population prevalence. Consider also significant disturbances of menstrual, sexual and reproductive function of a female organism, which develop on the background of manifestations of benign tumors of female genital organs and genital endometriosis. To deepen the students' understanding of the importance of medical ethics and deontology at

communication with patients. To continue developing students' sense of professional responsibility for their own actions and the fate of the patient. To master the ability to deepen psychological contact with the gynecological patient. In order to strengthen self-awareness, to pay attention to the contribution of domestic and foreign scientists to the study of the problem of benign tumors of the female genital organs and genital endometriosis.

### IV. Interdisciplinary integration

Discipline	To Know	To Be Able
<b>I. Previous disciplines (providing):</b>		
History of medicine	- contribution of domestic and foreign scientists to study the problem of benign tumors of female genital organs and genital endometriosis	
Human anatomy and topographic anatomy	- structure of external genitals; - structure of internal genitals;	- to interpret information about the structure female genital organs, age

		differences of the genital organs
<b>II. The following disciplines (providing):</b>		
Surgery, urology	- possible complications arising from impaired function of adjacent to the internal female genitalorgans (intestine, ureter, bladder) at the spread of endometrioid heterotopias or at large sizes of benign tumors	- to diagnose using clinical and instrumental methods of complication by related organs
<b>III. Intra-curricular integration:</b>		
Differential diagnosis of benign tumors of female genital organs with malignant tumors	- major complaints and clinical manifestations of benign tumors of the female genital organs in comparison with malignant tumors - the main classifications of benign tumors of the female genital organs; endometriosis and malignant tumors	- specify the criteria for differential diagnosis of benign tumors of the female genital organs and malignant tumors by means of the given classifications
Principles of examination of women with benign tumors of the female genital organs and genital endometriosis	- algorithm for examination of women with benign tumors of female genital organs and genital endometriosis	- to demonstrate the methodology of external and internal gynecological examination
Ultrasound in the diagnosis of benign tumors of the female genital organs and genital endometriosis	- the main criteria for ultrasound diagnostics	- to demonstrate the possibilities of ultrasound examination in the office of functional diagnostics
Laparoscopy as a method of diagnosis and treatment		- to demonstrate the basic stages of laparoscopic

of patients with benign tumors of the female genital organs and genital endometriosis	-main indications for laparoscopic intervention	examination on the model
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## V. TABLE OF CONTENTS OF LESSON:

### STRUCTURAL-LOGICAL SCHEME OF EMPLOYMENT

Pathohistological classification of benign ovarian tumors

#### 1. Physiological (functional cysts)

- ✓ Follicular cyst
- ✓ Yellow body cyst

#### 2. Germinogenic benign ovarian tumors

- ✓ Mature teratoma (dermoid cyst)
- ✓ Unripe teratoma

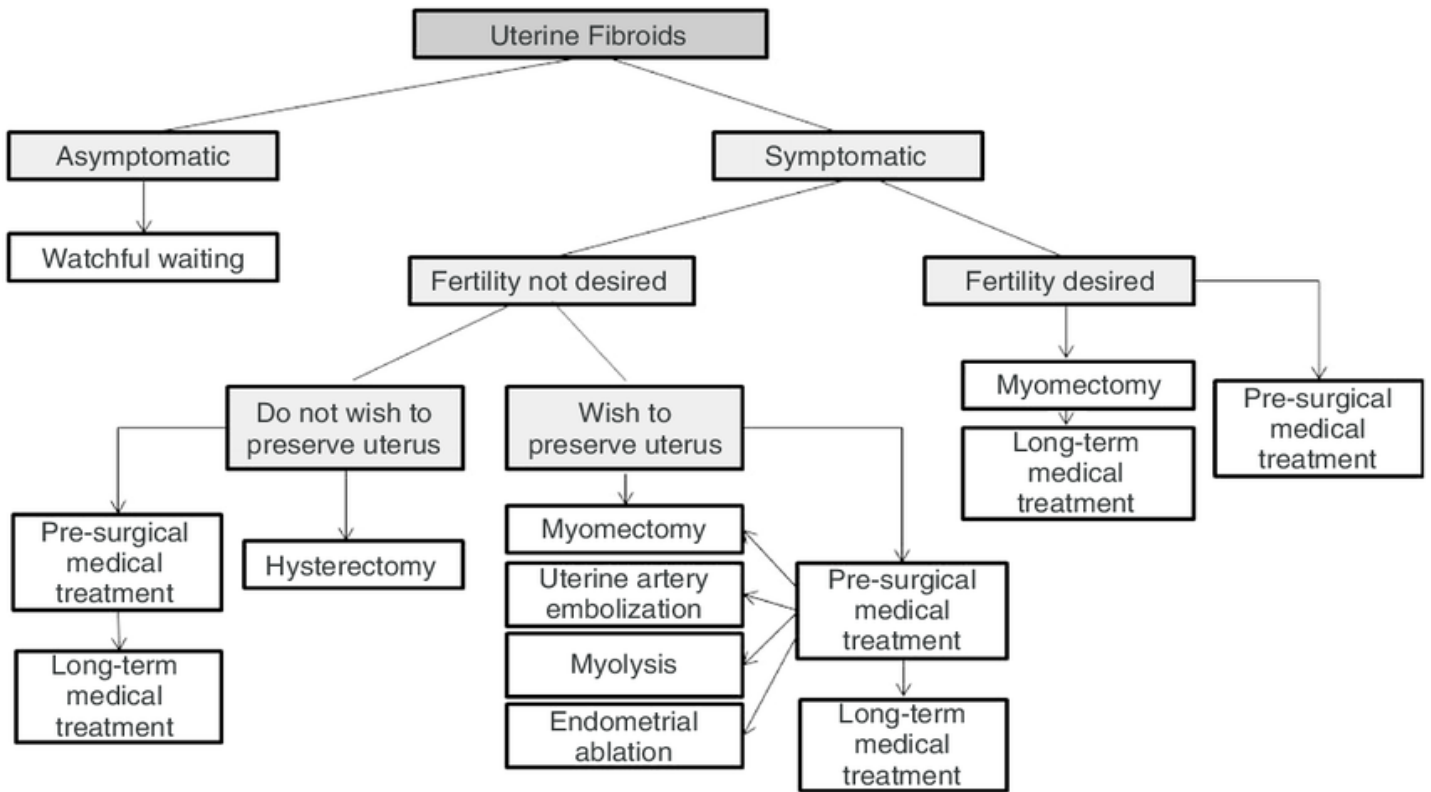
#### 3. Epithelial benign ovarian tumors

- ✓ Serous cystadenoma
- ✓ Mucinous cystadenoma
- ✓ Endometrioid cystadenoma
- ✓ Brenner tumor
- ✓ Light cell tumor

#### 4. Benign Tumor Tumors / Ovarian Stromal Tumors

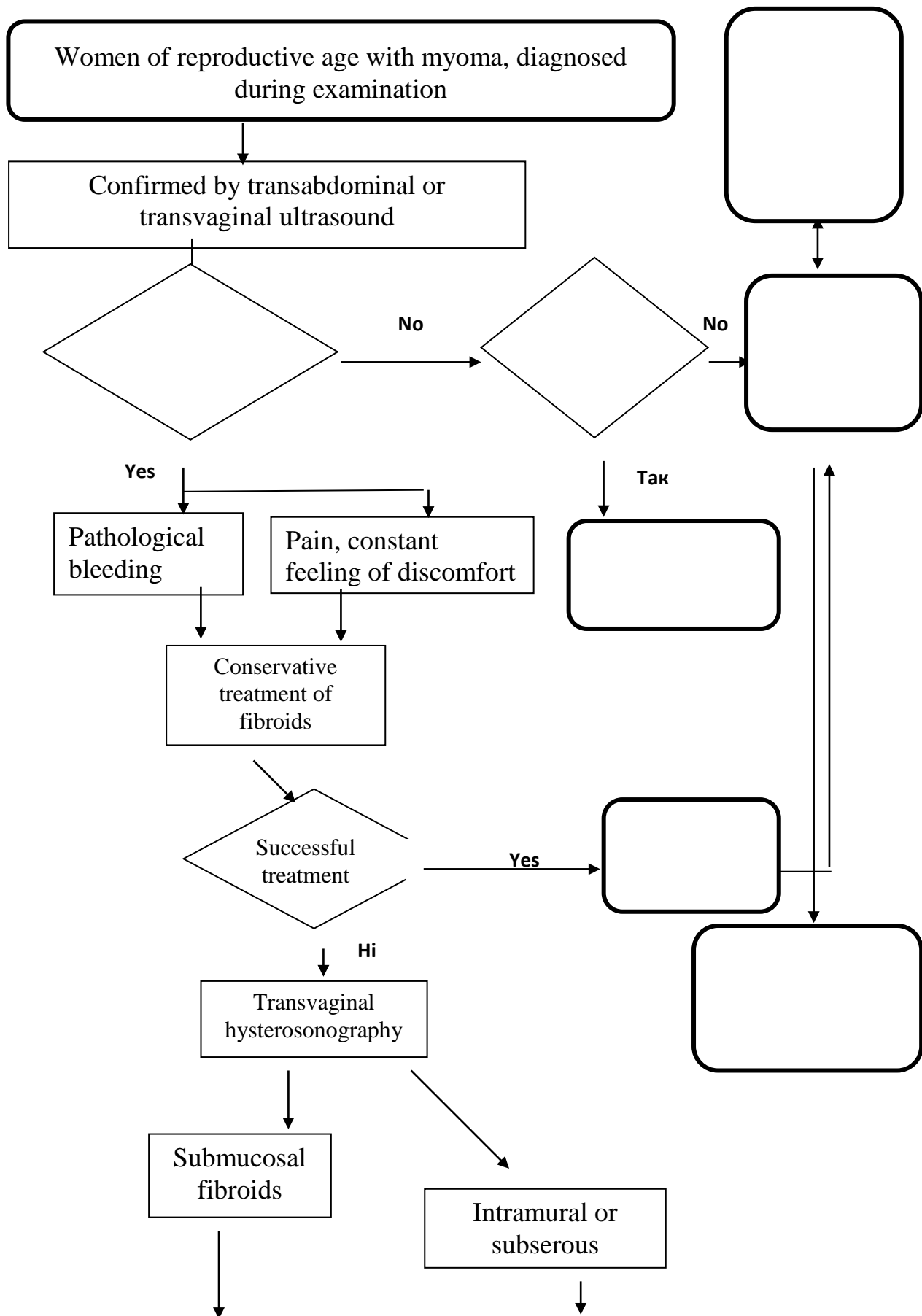
- ✓ Granular tumor
- ✓ Tumor
- ✓ Ovarian fibroma
- ✓ Cep Sertoli / Leydig cell tumor

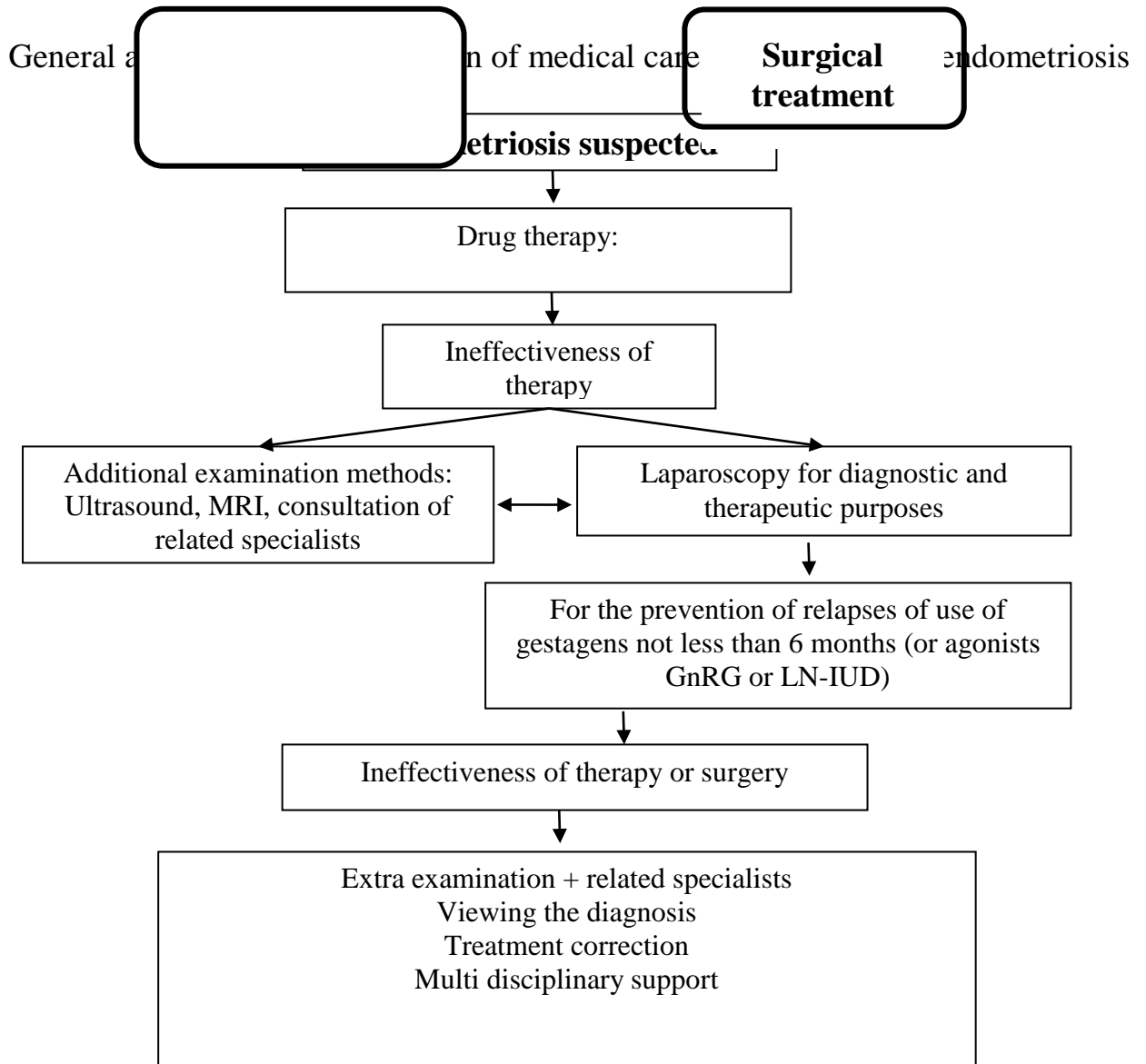
# Uterine fibroid treatment algorithm



Medical treatment includes:

1. Fibroid-directed therapies: ulipristal acetate and GnRH agonists
2. Symptom relieving therapies, as listed in Table 2





## **VI. PLAN AND ORGANIZATIONAL STRUCTURE OF THE LESSON:**

№ p / p	The main stages of the lesson, their Functions and Content	Levels of Learning	Methods control learning materials	methodical providing	time min.
<b>I. Preparatory stage</b>					
1. 2.	Organization of classes Setting educational goals and motivation			Methodical development	15хв.
3.	Output level control knowledge, skills, ability: 1) contributing reasons development of benign tumors of the female genital organs and genital endometriosis (basic theories of development); 2) modern classification of uterine leiomyoma, benign ovarian tumors and endometriosis; 3) the main clinical symptoms of uterine leiomyoma, benign ovarian tumors and endometriosis; 4) modern methods of diagnostics of uterine leiomyoma, benign ovarian tumors and endometriosis; 5) basic principles of treatment of uterine leiomyoma, benign ovarian tumors and endometriosis.	II $\alpha$	Individual oral questioning. Test control Level II. Solution typical tasks Level II	Questions for individual verbally poll. Level II test tasks. Typical level II tasks thematic tables, posters, models, slides.	1год. 15хв.
<b>II. The main stage</b>					
4.	Formation of professional skills and competences: 1) work in women's consultations, gynecological department, operating unit; 2) master the techniques collecting anamnesis, external and internal gynecological	III $\alpha$  III $\alpha$	Practical training  Professional training in solution atypical clinical situations	Algorithms for formation practical skills. Gynecological tools for examination gynecological patient. Phantoms.	1год. 40хв.



	<p>research;</p> <p>3) to supervise a gynecological patient with uterine leiomyoma, benign ovarian tumors and ingenuous endometriosis;</p> <p>4) evaluate and interpret survey results the patient;</p> <p>5) hold a differential diagnosis in patients with uterine leiomyoma, benign ovarian tumors and genital endometriosis;</p> <p>6) make the diagnosis according to received data;</p> <p>7) identify and justify medical tactics.</p>			<p>Models.</p> <p>Algorithms for formation professional skills and skills. Patients. Illnesses. Situational atypical tasks</p> <p>Level III.</p>	
<b>III. The final stage</b>					
5.	Level control and correction professional skills.	III $\alpha$	Individual control practical skills and theirs results. Analysis and evaluation results clinical work. Level III test control.	Gynecological tools. Results clinical examination. Level III test tasks. Atypical level III tasks.	30XB.
6.	Summary of the lesson.		The solutions are atypical level III tasks.	Indicative map for self work with literature.	5XB.
7.	Homework.				15XB.

## VIII. MATERIALS OF METHODOLOGICAL PROVISION OF LESSON:

7.1. Control materials for the preparatory stage of the lesson.

Theoretical basics of mastering the topic:

1. What is the anatomical and histological structure of the external and internal genital organs?
2. Give a definition of uterine body leiomyoma.
3. What are the main current approaches to the etiopathogenesis of uterine leiomyoma?
4. Modern classification of uterine leiomyoma with indication of types of myomatous nodes according to ultrasound and Doppler measurements.
5. What are the current possibilities for the diagnosis of uterine leiomyoma?
6. What should be the medical tactics for diagnosing uterine leiomyoma depending on the location, size and clinical symptoms?
7. Give a definition of cysts and ovarian cysts.
8. What are the main causes contributing to the development of different types of benign ovarian tumors?
9. Modern pathohistological classification of benign ovarian tumors.
10. What are the current standards for the diagnosis of benign ovarian tumors?
11. Approaches to differential diagnosis of benign and malignant ovarian tumors.
12. What should be the medical tactics for diagnosing benign ovarian tumors?
13. Date of determination of endometriosis.
14. What are the main current theories of the emergence and spread of endometrioid heterotopias?
15. Modern classification of endometriosis.
16. The main clinical symptoms of endometriosis depending on the location of heterotopias.
17. What are the current diagnostic options for genital endometriosis?
18. What are the current principles for the treatment of genital endometriosis? Basic approaches to prescribing hormone therapy for endometriosis and indications for surgical treatment?

Test Control Materials (II $\alpha$ ):

A. Multiple choice test.

Indicate indications for surgical treatment of uterine leiomyoma

1. Age of the patient.
2. Symptomatic leiomyoma (with hemorrhagic and pain syndrome, presence of anemia, symptoms of compression of adjacent organs).
3. The magnitude of leiomyoma 13-14 weeks or more.

4. The presence of submucosal node.
5. Suspicion of power failure of the node.
6. A history of surgery data in the abdomen.
7. The presence of a subserous node of myoma on the leg (due to the possibility of a twist of the node).
8. The presence of concomitant pathology of applications.
9. Rapid growth (4-5 weeks a year or more) or resistance to therapy with Gn-W analogues).
10. Leiomyoma in conjunction with endometrial or ovarian tumors.
11. Extragenital pathology.
12. Infertility due to uterine leiomyoma.

B. Test for drawing parallels, establishing logical connections between data groups  
 Establish a logical link between the following clinical manifestations of pain syndrome and the localization of endometriosis

1.	Uterus	Interstitial cystitis Urinary tract infection Urolithiasis
2.	Intestine	Hematosalpins Ectopic pregnancy Pelvic inflammatory disease
3.	Bladder	Musculoskeletal pain Neuropathic pain Varicose veins of the pelvic veins The soldering process
4.	The ovaries	Mittelschmerz (ovulatory pain) Ovarian cysts (rupture, pervert) Ovarian stump (remnant) syndrome
5.	Fallopian tubes	Primary dysmenorrhea Adenomyosis
6.	Common reasons	Irritable bowel syndrome Inflammatory bowel disease Chronic constipation

## B. Addition test

List the main groups of benign ovarian tumors according to the international pathological classification

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

## D. Test to establish the correct sequence

Establish the correct sequence of the algorithm of organization of medical care for patients with endometriosis

1. In order to prevent recurrence of the use of progestogens at least 6 months (or GnRH or LN-Navy agonists)
2. Laparoscopy for diagnostic and therapeutic purposes
3. Suspected endometriosis
4. Additional methods of examination: ultrasound, MRI, consultation of related specialists
5. The ineffectiveness of therapy or surgery
6. Drug therapy: Gestagens, COCs, NSAIDs
7. The ineffectiveness of therapy
8. Additional examination: review of related specialists; viewing the diagnosis; treatment correction; multidisciplinary support

## Typical Level II Tasks:

### Problem I.

Patient B., 38, complains of heavy prolonged periods of 6-7 days, painful in the first two days. Considers himself a patient about 3 years, when began to prolong the duration of menstruation, menstruation became more profuse and painful. From the anamnesis it is found out that menstrual periods were established from the age of 14, at once, for 3-4 days, painless. Married with 22 years, 2 pregnancies, of which childbirth - one and one medabortion seven years ago. Vagina free, cervical cylindrical, clean. The uterus is enlarged to the size of 12 weeks of pregnancy, dense, hilly, mobility is limited. The appendages on both sides are not enlarged, their area is painless, the vaults are free. Allocation of blood, abundant. What is the preliminary diagnosis, examination plan, treatment?

Answer.

### Task 2.

Patient V., 42 years old, was admitted for persistent pulling pain in the lower abdomen and in the lumbosacral region. Within 3 years notes that in addition to these

constant pains before menstruation and on the first day there are intense pain in the lower abdomen with irradiation in the rectum. Menstruation during this time became plentiful, prolonged and after termination often appear spotty bloody discharge of dark brown color within 2-3 days. In vaginal examination it was found that the cervix is cylindrical, cyanotic. The body of the uterus is enlarged in anterior-posterior size, generally to the size of 5-6 weeks of pregnancy, dense, uneven consistency, painful on palpation. The appendages on both sides are not enlarged, the back arch is painful on palpation. The mucous secretions. What is the preliminary diagnosis, examination plan, treatment?

Answer.

Problem 3.

During the examination, a woman, 28 years old, in the region of the left appendages of the uterus revealed the formation of a dense and elastic consistency, with a smooth surface, movable, painless, measuring 10x8 cm. , pathological formations by internal genital organs were not diagnosed. Over the last year, he has noted menstrual irregularities (cycle length ranges from 16 to 40 days) and periodic aching pain in the left lower abdomen associated with menstruation. Ultrasound revealed: in the projection of the left appendages a single-chamber formation of 9x7 cm in size with a smooth capsule containing a fine heterogeneous mass is visualized.

What is the preliminary diagnosis, examination plan, treatment?

Answer.

## 7.2 Materials of methodological support for the main stage of the lesson

№ p / p	Tasks	Sequence of implementation	Remarks, warnings about self-control
1.	Survey with external gynecological examination	<p>Follow this sequences:</p> <ol style="list-style-type: none"> <li>1) conduct a general examination of the patient;</li> <li>2) to carry out examination and palpation of mammary glands;</li> <li>3) to give the patient horizontal position;</li> <li>4) continue breast palpation;</li> <li>5) to carry out examination of a stomach;</li> <li>6) to carry out consecutive palpation of all departments of a stomach, percussion and auscultation.</li> </ol>	1. When horizontal the position of the pregnant woman there is a syndrome aorto-forging compression.
2.		<p>Follow this sequences:</p> <ol style="list-style-type: none"> <li>1) provide the patient with an appropriate one provisions for internal gynecological study;</li> <li>2) wear sterile gloves;</li> <li>3) conduct an examination of the external genitalia;</li> <li>4) to carry out examination of the vagina and vaginal part of the cervix with the help of gynecological speculum;</li> <li>5) conduct a bimanual vaginal examination, determining the state of the vagina, cervix, uterus and appendages.</li> </ol>	2. Empty bladder and rectum

### 7.3 Materials of control of the final stage of the class.

#### Classification test

Determine the classification of uterine leiomyoma according to the location of the leiomyomatous nodes and the most characteristic clinical symptoms for this localization

#### Atypical level III task

<b>Types of localization of myomatous nodes</b>	<b>Subserous uterine leiomyoma</b>	<b>Intramural uterine leiomyoma</b>	<b>Submucosal uterine leiomyoma</b>
<b>Clinical symptoms of uterine leiomyoma</b>			
Menorrhagia			
Metrology			
Dysmenorrhea			
Impaired function of adjacent organs (dysuria, dyshesia)			
Impairment of reproductive function (infertility, miscarriage)			
Pathological discharge from the genital tract			

#### Task 1.

Patient B., 28, complains of intense pain during menstruation, dyspareunia, and dyshiosis. Considers himself sick for about 3 years, when a year after the physiological delivery, the following complaints gradually appeared, the number of days of menstruation increased, menstruation became profuse and painful. From the anamnesis it was found out that menstrual periods were established from the age of 14, at once, for 5-6 days, moderately painful, on the eve of menstruation there were slight dark brown discharge from the genital tract. Married to 22 years, 1 pregnancy, last menstruation 27 days ago. Vagina free, cervical cylindrical, clean. The body of the uterus is slightly enlarged in the anterior-posterior size, restricted by the movable. The appendages on both sides are not palpated, their area is painless. Palpation of the posterior vault palpates its contraction and tenderness, other vaulting is free, painless. The secretions are dark-blooded, minor.

1. What is the preliminary diagnosis, the differential diagnosis plan?
2. Which method of diagnosis is the most significant in this clinical case?

Answer.

## Task 2.

Patient V., 36 years old, was admitted to the gynecological department with a complaint about the absence of pregnancy in her 2nd marriage for 4 years, interested in pregnancy. Three years ago, a nodal leiomyoma of the uterus was diagnosed with cervical localization of one of the myomatous nodes. Menstruation during this time became plentiful, prolonged, without disturbance of the menstrual cycle. In vaginal examination found that the cervix is cylindrical in shape, 3 cm long, in the area of the vaginal part of the cervix is densely elastic painless formation of 5 cm by 6 cm in size. painless on palpation. The appendages on both sides are not enlarged, the vaults are free, deep. The mucous secretions are moderate. The diagnosis of uterine leiomyoma was confirmed during vaginal ultrasound examination.

1. What is the tactic of maintaining this patient, taking into account the localization of the myomatous node and its reproductive plans?

Answer.



#### 7.4 Materials of methodological support of students 'self-preparation (indicative map for organizing students' independent work with educational literature)

<b>№ p / p</b>	<b>Training tasks</b>	<b>Instructions to the task</b>
1.	Explore: Current approaches to the etiopathogen of uterine leiomyoma	To understand the main etiopathogenetic moments of origin and development of uterine leiomyoma
2.	Current classifications of uterine leiomyoma by localization of myomatous nodes and their type (by peculiarities of vascularization)	Pay attention to the classification by type of vascularization of myomatous nodes
3.	Modern methods of diagnostics of uterine leiomyoma	To name standard methods of diagnostics of uterine leiomyoma according to the current national clinical protocols
4.	Current approaches to the treatment of uterine leiomyoma	To pay attention to indications for conservative and surgical treatment of uterine leiomyoma; to know modern, pathogenetically grounded, minimally invasive methods of treatment of uterine leiomyoma
5.	The main causes and factors contributing to the development of benign ovarian tumors	To know the main points of the etiopathogenesis of the development of major benign ovarian tumors
6.	Modern pathohistological classification of benign ovarian tumors.	Know the classification of benign ovarian tumors according to MKH-10 and the most common pathohistological classifications
7.	Basic anamnestic, clinical and additional methods of diagnosis of benign ovarian tumors.	Modern diagnostics of benign ovarian tumors.
8.	Modern principles of treatment of benign ovarian tumors.	Features of treatment of benign ovarian tumors in women of reproductive age.
9.	A modern look at the etiopathogenesis of endometriosis	Know the basic theories of endometriosis development
10.	Modern classifications of	Know the classification of

<b>№ p / p</b>	<b>Training tasks</b>	<b>Instructions to the task</b>
	endometriosis	endometriosis according to MKH-10 and the most common classifications
11.	Basic anamnestic, clinical and additional methods for the diagnosis of endometriosis.	Know the principles of the "gold standard" of endometriosis diagnosis
12.	Current approaches to the treatment of endometriosis. Indications for the appointment of hormonal, surgical and combination therapy.	Approaches to the treatment of deep infiltrative forms of endometriosis

## VIII. LITERATURE

### a) Educational.

#### Basic:

1. Obstetrics & gynecology : textbook / V. I. Gryshchenko [et al.] ; ed. by.: V. I. Gryshchenko, M. O. Shcherbina. - Kyiv : AUS Medicine Publ. - Vol. 2 : Gynecology. - 2nd ed. - 2018. - 352 p.
2. Gynecology: a textbook / ed. B.M. Wentkivsky, G.K. Stepankivska, M.E. Yarotsky. - K. : VSV Medicine, 2012. - 352 p.
3. Obstetrics and Gynecology: in 4 volumes: national textbook / no. ed. ; in a row. Academician of the National Academy of Medical Sciences of Ukraine, prof. V.M. It is blocked. - Volume 3: Non-surgical gynecology / qty. ed. ; in a row. Acad. NAMS of Ukraine, prof. V.M. It is blocked. - K. : VSV "Medicine", 2014. - 928 p.
4. Obstetrics and Gynecology. Tatarchuk TF, et al. Kiev: Medicine. - 2013.
5. Gynecology: a guide for doctors / VK Likhachev. - Vinnytsia: New Book, 2018. - 688 p.

#### Additionally:

1. Munro, M.G. Abnormal uterine bleeding. Cambridge: Cambridge University Press (2010).
2. David McKay Hart, Jane Norman. Gynecology. Illustrated clinical guide. - M.: Binom. - 2009. - 463p.
3. Tatarchuk TF, Solsky YP Endocrine gynecology (clinical essays). - K. : Testament, 2003. - 304 p.
4. Obstetrics and gynecology: diagnosis and treatment. Tutorial. In 2 volumes. DeCherney A.H., Nathan L. 2009 Publisher: MEDpress-inform.
5. Atlas of ultrasound diagnostics in obstetrics and gynecology. Dubile P., Benson K.B. 2009 Publisher: MEDPress-inform.
6. Gynecology. Illustrated clinical guide. Hart JM, Norman J. 2009 Publisher: Binom.
7. Outpatient care in gynecology / ed. V.A. Beniuk // Gynecologist doctor's guide. - 2nd ed., Suppl. - K. : Publishing House "Health of Ukraine", 2010. - 462 p. - (The series "Library" Health of Ukraine ).
8. Algorithms in Obstetrics and Gynecology / Ed. V.A. Benyuk // Doctor's Guide. - K. : Doctor-Media LLC, 2009. - 428 p. (Library series "Health of Ukraine").
9. A guide to practical skills in gynecology, obstetrics and neonatology / Ed. prof. AND I. Senchuk. - K. : Hydromax, 2006. - 368s.
10. Ministry of Health of Ukraine Order No. 676 of December 31, 2004 "On approval of clinical protocols on obstetric and gynecological care."
11. Electronic document "Adapted clinical guidelines based on evidence of" Abnormal uterine bleeding ", 2016.

12. National consensus on the management of patients with abnormal uterine bleeding of the Association of Gynecologists and Endocrinologists of Ukraine. Reproductive endocrinology. 2015; 1 (21): 8-12.

13. Order of the Ministry of Health of Ukraine No. 319 dated 06.04.2016. «Unified clinical protocol of primary, secondary (specialized) and tertiary (highly specialized) medical care. Tactics of management of patients with genital endometriosis », 2016.

14. Order of the Ministry of Health of Ukraine No. 582 of December 15, 2003 "On approval of clinical protocols on obstetric and gynecological care."

15. Order of the Ministry of Health of Ukraine No. 624 dated November 3, 2008. on amendments to the order of the Ministry of Health of Ukraine No. 582 of December 15, 2003 "On approval of clinical protocols on obstetric and gynecological care", order of the Ministry of Health of Ukraine No. 676 of December 31, 2004. "On approval of clinical protocols on obstetric and gynecological care."

b) Methodical.

1. Kazakov VM, Vitenko IS, Talaenko OM, Kamenetsky MS, Pervak MB, Kotlubey OV Development of methodological guidelines for students of higher medical educational establishments in accordance with modern state standards and principles of the Bologna process (Methodical recommendations for teachers of higher medical educational establishments of IY accreditation level): Kyiv-Donetsk: CMKMOZ of Ukraine, 2005.-158 p.

2. Miller VE Methodical bases of preparation and carrying out of educational employment in medical universities (manual): - Kyiv, Khreschatyk, 2006. - 80 p.

## **BACKGROUND AND PRE-CANCER DISEASES OF FEMALE GENERAL BODIES. MALIGNANT NEOPLASMS OF THE GENITALS. TROPHOBLASTIC DISEASES**

### **I. SCIENTIFIC AND METHODOLOGICAL RATIONALE OF THE THEME (UPDATE):**

The problem of background, precancerous and malignant diseases of the female genital organs is extremely important. The causes and mechanisms of the development of malignancies have not yet been fully determined, so diagnosis of the pathological process at the stage of precancerous diseases remains the main method of preventing cancer. Trophoblastic disease occupies a special place among the tumors of the female genital organs. Trophoblastic disease is a tumor that develops from the trophoblast and is therefore associated with pregnancy (occurs during pregnancy, postpartum and post-abortion periods, after ectopic pregnancy). Under the name "trophoblastic disease", such pathological conditions of the trophoblast are combined, such as hydatidiform mole and choriocarcinoma, which is one of the most malignant tumors.

For a logical combination of information obtained from the anatomy, histology of the female genital organs, as well as to facilitate the work on the development of primary gynecological skills, the issues of the structure of the external and internal genital organs should be further covered, their topography, blood supply, innervation should be paid attention. The repetition of the acquired knowledge of the anatomy of the female genital organs is carried out on a model. The teacher pays great attention to the collection of gynecological anamnesis, assessment of the state of menstrual, sexual and reproductive functions of the female body. Attention is drawn to the main complaints that are characteristic of precancerous diseases: pathological changes on the part of the external genital organs, pathological white, pain when combined with the inflammatory process; malignant processes are characterized by the presence of complaints of pain, blood flow of varying intensity (in trophoblastic disease). Using phantom work, repeat the procedure of special gynecological examination (examination of external genitals, examination in speculum, vaginal, bimanual, rectal examination). In the study of special methods, pay attention to the special importance of this knowledge in the activity of the doctor at diagnosis. Additional methods include flake smear examination, cytomorphological examination, colposcopy, target biopsy, ultrasound, histological examination (note to students that the verification of the diagnosis that indicates the malignancy of the process can be definitively established only based on the results of histological examination), determination of  $\beta$ -HCG level. The teacher shows by clinical examples the use of special methods of examination, which allow in each case to determine the presence of precancerous or malignant process of the vulva, vagina, ovaries, cervix or body of the uterus.

Particular attention is paid to the supervision of gynecological patients with precancerous diseases of the vulva, vagina, cervix or body of the uterus, possibly with trophoblastic disease, collection of complaints, anamnesis, special examination, additional methods of examination, with subsequent analysis of clinical cases.

## II. LEARNING OBJECTIVES:

### 1.1 The student should know ( $\alpha$ -II):

- anatomical structure of external and internal genitals
- etiology and pathogenesis of benign (background), precancerous and malignant diseases of the external genitalia and vagina;
- classification of benign (background), precancerous and malignant diseases of the external genitalia and vagina;
- methods of diagnosis and verification of the diagnosis of benign (background), precancerous and malignant diseases of the external genitalia and vagina;
- methods of treatment and prevention of benign (background), precancerous and malignant diseases of the external genitalia and vagina;
- basics of colposcopic and cytological pictures of cervical epithelium;
- Cervical cancer risk groups
- the etiology and pathogenesis of the development of benign (background), precancerous and malignant diseases of the cervix;
- clinical and colposcopic classification of benign (background), precancerous and malignant diseases of the cervix;
- methods of treatment and prevention of benign (background), precancerous and malignant diseases of the cervix;
- etiopathogenesis of precancerous and malignant diseases of the uterine body (endometrium);
- pathohistological classification of endometrial hyperplasia;
- clinical symptoms and current methods of diagnosis of endometrial hyperplasia, endometrial cancer and leiomyosarcoma;
- current standards for the treatment of endometrial hyperplasia, endometrial cancer and leiomyosarcoma;
- etiopathogenesis of precancerous and malignant ovarian diseases;
- classification of precancerous and malignant ovarian diseases;
- modern methods of diagnosis of precancerous and malignant ovarian diseases;
- current standards for the treatment of precancerous and malignant ovarian diseases;
- definition, etiopathogenesis and classification of trophoblastic disease;
- histological characteristics of bladder insertion, invasive bladder insertion, choriocarcinoma;
- clinical picture, diagnosis, differential diagnosis of malignant forms of trophoblastic disease.

- modern methods of treatment of trophoblastic disease.

1.1 The student must be able to ( $\alpha$ -III):

To master the skills:

- collection of general and special medical history;
- general examination of the patient;
- conducting a special gynecological examination;
- taking smears from the urethra, cervical canal, vagina, and rectum;
- coltservicoscopic examination;
- performing a target biopsy from the surface of the vaginal part of the cervix;
- performing an endometrial aspiration biopsy;
- bimanual (abdominal-vaginal examination);
- the method of hysteroressectoscopy, fractional scraping of the mucous membrane of the uterus;
- Based on the data of the special gynecological examination of the patient and the results of the additional examination, make the right diagnosis and choose the tactics of treatment.

### III. PURPOSE OF PERSONAL DEVELOPMENT (EDUCATIONAL OBJECTIVE):

To educate students about the importance of the problem of timely differential diagnosis of benign, cancerous and malignant diseases of the female genital organs. Pay particular attention to the risks and consequences of violating the principles of timely diagnosis and treatment; first of all, the cancerous and malignant diseases of the female genital organs. Pay particular attention to the preventive examinations and early clinical symptoms of malignancies of the female genital organs. To deepen the students' understanding of the importance of medical ethics and deontology at communication with patients with suspicion and verification of malignant diseases of female genital organs. To continue developing students' sense of professional responsibility for their own actions and the fate of the patient. To master the ability to deepen psychological contact with the gynecological patient. In order to strengthen self-awareness, pay attention to the contribution of domestic and foreign scientists to the study of benign, precancerous and malignant diseases of the female genital organs.

#### IV. Interdisciplinary integration

Discipline	To Know	To Be Able
<b>I. Previous disciplines (providing):</b>		
History of medicine	- contribution of domestic and foreign scientists to the study of the background, precancerous and malignant diseases of female genital organs	- to interpret information about the structure of female genital organs, age differences of the genital organs
Human anatomy and topographic anatomy	- structure of external genitals; - structure of internal genitals	
<b>II. The following disciplines (providing):</b>		
Surgery, urology	- possible complications arising from the spread of malignant neoplasms to adjacent organs	- diagnose complications from adjacent organs
<b>III. Intra-curricular integration:</b>		
Differential diagnosis of background, precancerous and malignant neoplasms of female genital organs	- classification of background, precancerous and malignant neoplasms of female genital organs - main complaints and clinical manifestations in diseases of different localization	- specify the criteria for differential diagnosis of background, precancerous and malignant neoplasms of female genital organs by means of the given classification
Principles of examination of women with background, precancerous and malignant neoplasms of female genital organs	- algorithm for examination of women with background, precancerous and malignant neoplasms of female genital organs	- Demonstrate the methodology of external and internal gynecological examination
Ultrasound in the diagnosis of background, precancerous and malignant neoplasms of female genital organs	- the main criteria for ultrasound diagnostics	- demonstrate the possibilities of ultrasound examination in the office of functional diagnostics



Colpocervicoscopy as a method of diagnosis and treatment of cervical pathology	-main indications for colpocervicoscopic examination	- to demonstrate the basic stages of colpocervicoscopic examination on the model
The importance of laparoscopy and hysteroscopy in the diagnosis and treatment of background, precancerous and malignant neoplasms of female genital organs	-main indications for laparoscopic and hysteroscopic examination	- to demonstrate the basic stages of laparoscopic and hysteroscopic examination on the model

## V. CONTENTS OF THE TOPIC:

### STRUCTURAL-LOGICAL SCHEME OF EMPLOYMENT

Colposcopic classification of pathological processes of the cervix. (C)  
(EV Kokhanevich, 1997)

#### I. Benign pathological processes.

1. Ectopy of the cylindrical epithelium:
  - a) disharmonious;
  - b) post-traumatic.
2. A benign transformation zone (a zone of benign metaplasia):
  - a) unfinished transformation zone;
  - b) complete transformation zone.
3. Inflammatory processes of the cervix:
  - a) exocervicitis;
  - b) endocervicitis.
4. Real erosion.
5. Benign polypoid formations.
6. Endometriosis of the cervix.

#### II. Precancerous conditions of the cervix.

1. Simply leukoplakia.
2. Fields of dysplasia:
  - a) multilayered squamous epithelium;
  - b) metaplastic prismatic epithelium.
3. The papillary zone of dysplasia:

- a) multilayered squamous epithelium;
  - b) metaplastic prismatic epithelium.
4. Pre-tumor transformation zone.
  5. Warts.
  6. Precancerous polyps.

### III. Preclinical cervical cancer.

1. Proliferating leukoplakia.
2. Fields of atypical epithelium.
3. The papillary zone of atypical epithelium.
4. Zone of atypical transformation.
5. Area of atypical vascularization.

### IV. Clinically expressed cancer.

1. Exophytic form.
2. Endophytic form.
3. Mixed form.

### Classification of endometrial hyperplasia (WHO, 2004):

- simple non-atypical endometrial hyperplasia is characterized by an increase in both glandular and stromal elements, with a slight predominance of the former;
- The main feature of complex non-atypical endometrial hyperplasia is the presence of a close location of the glands of widespread or focal nature. The glands are snug against each other with the loss of stroma between them. Another important feature of this type of hyperplasia is the increased structural complexity of the glands with numerous lateral and internal projections of the epithelium into the lumen of the glands and stroma. The glands usually have a more pronounced multiplicity of the epithelium than in the case of simple hyperplasia.
- simple atypical glandular endometrial hyperplasia differs from simple and combined non-atypical hyperplasia with the presence of atypia of gland cells, which is manifested by the loss of polarity of location and unusual configuration of nuclei, which often take a round shape. The nuclei of cells in this type of hyperplasia are polymorphic, and in them large nuclei are often isolated. This type of atypical hyperplasia is rare;
- complex atypical endometrial hyperplasia is characterized by pronounced proliferation of the epithelial component, which is combined with tissue and cellular atypia without invasion of the basement membrane of glandular structures. The glands lose their regular positioning for the normal endometrium, they are extremely varied in shape and size. The epithelium lining the glands is composed of large cells with polymorphic, rounded or elongated nuclei with impaired polarity and multiple locations.

Indications for surgical treatment of patients with endometrial hyperplastic processes (B):

At reproductive age:

- complex atypical GE in the absence of the effect of conservative therapy after 3 months,
- simple atypical and complex atypical hyperplasia with ineffective treatment after 6 months.

In menopause:

- complex atypical hyperplasia - at diagnosis,
- simple atypical and complex atypical hyperplasia - in the absence of effect from conservative therapy after 3 months.

#### **Standard examination of patients with cervical cancer**

<b>Clinic of all-hospital network</b>	<b>Advisory polyclinic specialized institution</b>
<b>3-10 days</b>	<b>Up to 8 days</b>
<ol style="list-style-type: none"> <li>1. physical examination</li> <li>2. Gynecological recto-vaginal examination</li> <li>3. general and biochemical analysis of blood, urine;</li> <li>4. Colposcopy</li> <li>5. cytological examination</li> <li>6. biopsy</li> <li>7. ultrasound examination</li> <li>8. separate diagnostic scraping of the uterine cavity and the mud of the mud canal</li> <li>9. chest radiography</li> <li>10. HIV examination, syphilis, viral hepatitis</li> </ol> <p>electrocardiography</p>	<ol style="list-style-type: none"> <li>1. physical examination</li> <li>2. Gynecological rectovaginal examination</li> <li>3. colposcopy, cytological examination</li> <li>1. Consultation of morphological preparations with LZP</li> <li>2. Biopsy of the tumor with morphological examination (in the absence of morphological confirmation of the diagnosis)</li> <li>3. if necessary, fibrogastroduodenoscopy and colonoscopy</li> <li>4. Consultation of urologist, cystoscopy, excretory urography</li> <li>5. Computed tomography by impressions</li> </ol> <p>consultation of a chemotherapist, radiologist, anesthesiologist and other specialists on readings</p>

## Schemes of standard treatment of patients with cervical cancer

Stage of the disease	SCOPE OF STANDARD TREATMENT
Stage 0 Tis, IA1 (infestation <3 mm) T1a1N0M0	<p>1. Surgical treatment</p> <p>a) conical excision of the cervix in young women after appropriate etiopathogenetic treatment</p> <p>b) simple hysterectomy for cervical localization of the process or other adverse factors: uterine fibroids, tumors of the appendages</p> <p>Intra-cavity radiation therapy.</p>
Stage IA2 (3-5 mm infestation) T1a2N0M0	<p>– Surgical treatment: extirpation of the uterus with / without appendages, depending on age and presence of concomitant pathology (uterine fibromyoma, appendix tumors).</p> <p>– Intra-cavity radiation therapy.</p>
Stage IB1 (<4 cm) T1v1N0M0	<p>I. Combination treatment: surgical treatment (radical Wertheim hysterectomy) with / without appendix → in the presence of negative prognosis factors (low-differentiated form, lympho-vascular invasion) - adjuvant remote radiotherapy for the pelvic region.</p> <p>II. Combined radiation therapy.</p>
Stage IV2 - IIA (III) T1v2 -2a N0-1M0	<p>I. Combination treatment:</p> <ul style="list-style-type: none"> <li>- preoperative intra-cavity radiation therapy</li> <li>- surgical treatment (2-3 weeks) radical hysterectomy according to Wertheim</li> <li>- postoperative remote radiotherapy for the pelvis.</li> </ul> <p>II. Combined radiation therapy.</p>
Stage IIB T2vN0-1M0	<p>I. Combined radiation therapy: remote radiation therapy, intracavitary radiation therapy.</p> <p>II. Комбіноване лікування: (при наявності uterine fibroids, tumor and inflammatory lesions of the appendix and the inability to carry out cavity radiation therapy):</p> <ul style="list-style-type: none"> <li>- preoperative chemoradiation treatment</li> <li>surgical treatment in 2-3 weeks (radical Wertheim hysterectomy)</li> <li>-</li> </ul>
Stage IIIA T3aN0M0	<p>I. Combined radiation therapy.</p> <p>At indications - contact radiation therapy for mucous membrane of the middle and lower 1/3 of the vagina.</p> <p>In the presence of negative prognosis factors - adjuvant chemotherapy.</p>

<p>Stage III T3vN0M0</p>	<p>I. Combined radiation therapy. In the presence of negative prognosis factors - adjuvant chemotherapy.</p>
<p>Stage III T3a-NNM0</p>	<p>I. Combined radiation therapy. In the absence of contraindications - adjuvant chemotherapy.</p>
<p>Stage T4, any T at M1</p>	<p>I. Palliative courses in the field of chemotherapy. II. Palliative courses of radiation therapy and polychemotherapy in the absence of contraindications and expediency of their application.</p>

### Standard examination of ovarian cancer patients

<b>Clinic of all-hospital network</b>	<b>Advisory polyclinic of a specialized institution</b>
3-10 days	Up to 7 days
<ol style="list-style-type: none"> <li>1. History of illness and life</li> <li>2. physical examination</li> <li>3. Gynecological recto-vaginal examination</li> <li>4. General and biochemical analysis of blood, urine</li> <li>5. Colposcopy</li> <li>6. cytological examination</li> <li>7. ultrasound examination</li> <li>8. diagnostic separate scraping of the mucous membrane of the cervical canal and uterine cavity</li> <li>9. CA-125 tumor marker</li> <li>10. examination for human immunodeficiency virus, viral hepatitis, syphilis</li> <li>11. electrocardiography</li> <li>12. chest radiography</li> <li>cytological examination of ascitic fluid</li> </ol>	<ol style="list-style-type: none"> <li>1. History of illness and life</li> <li>2. physical examination</li> <li>3. Gynecological recto-vaginal examination</li> <li>4. Investigation of mammary glands, thyroid glands</li> <li>5. fibrogastroduodenoscopy</li> <li>6. colonoscopy</li> <li>7. Ultrasound examination of abdominal organs</li> <li>8. urologist's examination, cystoscopy</li> <li>9. excretory urography</li> <li>10. Computed tomography</li> <li>11. CA-125 tumor marker and other tumor markers as indicated</li> <li>12. consultation of morphological preparations with a drug (in patients operated on a drug)</li> <li>13. according to the testimony of cytological examination of ascitic fluid consultation of a chemotherapist, radiologist, anesthesiologist and other specialists on indications</li> </ol>

### Schemes of standard treatment of ovarian cancer patients

Stage of the disease	SCOPE OF STANDARD TREATMENT
Stages IA, B G1-G2, (except for the cell-cell histotype):	<p>Surgery: extirpation of the uterus with appendages, resection of the great omentum and revision of the abdominal cavity, biopsy of lymph nodes, smear-prints from different departments of the abdominal cavity for the purpose of adequate staging.</p> <p>Conservative tactics (as exceptions): in young ovarian cancer patients with stage IA who wish to retain fertility in highly differentiated carcinomas (G1): unilateral adnexectomy, omentectomy → careful follow-up → after childbirth or end of childbirth.</p>
Stages IA, G3, 1C, IIA, B, C, all stages of light cell cancer	<p>Surgery: extirpation of the uterus with appendages and resection of the great omentum, combined surgery + adjuvant chemotherapy</p>
Stages III-IV	<p>Cytoreductive surgery (extirpation or extra-vaginal amputation of the uterus with appendages, omentectomy, removal, if possible, of all other tumor cells: in the abdominal cavity, retroperitoneal space, lymph nodes) → 6 courses of chemotherapy.</p>

### Standard examination of patients with endometrial cancer

<b>Clinic of all-hospital network</b>	<b>Advisory polyclinicspecialized institution</b>
<b>3-10 days</b>	<b>Up to 8 days</b>
<ol style="list-style-type: none"> <li>1. physical examination</li> <li>2. Gynecological recto-vaginal examination</li> <li>3. general and biochemical analysis of blood, urine;</li> <li>4. cytological examination</li> <li>5. ultrasound examination</li> <li>6. separate diagnostic scraping of the uterine cavity and the mud of the mud canal</li> <li>7. Chest X-ray</li> <li>8. HIV examination, syphilis, viral hepatitis</li> <li>9. electrocardiography virus scan</li> </ol>	<ol style="list-style-type: none"> <li>1. physical examination</li> <li>2. Gynecological rectovaginal examination</li> <li>3. Consultation of morphological preparations with the drug</li> <li>4. Biopsy of the tumor with morphological examination (in the absence of morphological confirmation of the tumor)</li> <li>5. Ultrasound of abdominal organs</li> <li>6. if necessary, fibrogastroduodenoscopy and colonoscopy</li> <li>7. urologist consultation, cystoscopy, excretory urography</li> <li>8. Computed tomography consultation of a chemotherapist, radiologist, anesthesiologist and other specialists on readings</li> </ol>



Schemes of standard treatment of patients with endometrial cancer

Stage of the disease	STANDARD TREATMENT
Stage T1aNoMo	1. Surgical treatment - pangisterectomy. 2. Intrauterine radiation therapy (method of choice)
Stage T1vNoMo (superficial invasion, tumor localization in the upper part of the mucous uterus, G1	1. Surgical treatment - pangisterectomy. 2. Intrauterine radiation therapy (method of choice)
Stage T1vNoMo (invasion to ½ myometrium, tumor localization in the lower part of the mucous membrane of the uterus, G2-3	Combination treatment: - - Surgical treatment - Extended pangysterectomy → - combined radiotherapy: postoperative remote radiotherapy for the pelvis
Stage T1c-2aNoMo, G2-3 T2vNoMo - G1	Combination treatment: - - Surgical treatment - Extended pangysterectomy → - combined radiotherapy: postoperative remote radiotherapy for the pelvis
Stage T2bNo-N1Mo G3	- Combination treatment: - surgical treatment - advanced pangysterectomy → combined radiotherapy: - postoperative remote radiotherapy for the pelvis. - polychemotherapy
Stage T3aNo-N1Mo G1-3	- Combination treatment: - surgical treatment - advanced pangysterectomy + omentectomy, removal of para-aortic lymph nodes (in the presence of their metastatic lesions) → - - combined radiotherapy: postoperative remote radiotherapy for the pelvis - polychemotherapy
Stage T3vNo-N1Mo G1-3,	- in the detection of metastatic lesions of the para-aortic lymph nodes. - Combination treatment: - - Surgical treatment - extended pangysterectomy, removal of para-aortic lymph nodes, in the presence of their metastatic lesions →

	<ul style="list-style-type: none"> <li>- - combined radiotherapy: postoperative remote radiotherapy for the pelvis</li> <li>- polychemotherapy</li> </ul>
<p>Stage T4a -4bNo-N1Mo-1</p>	<ul style="list-style-type: none"> <li>- - Surgical treatment and radiation therapy on an individual plan.</li> <li>- - Hormone therapy</li> <li>- Polychemotherapy</li> </ul>

## **VI. PLAN AND ORGANIZATIONAL STRUCTURE OF THE EMPLOYMENT:**

№ p / n	The main stages of the lesson, their functions and content	Levels of assimilation	Learning control methods	Methodological support materials	Time min.
<b>I. Preparatory stage</b>					
1.	Organization of classes			Methodical development	15 min.
2.	Setting educational goals and motivation				1h
3.	Output level control knowledge, skills, ability: 1) etiopathogenesis of background, precancerous and malignant neoplasms of female genital organs; 2) modern classification of background, precancerous and malignant neoplasms of female genital organs; 3) main symptoms and clinical picture of background, precancerous and malignant neoplasms of female genital organs; 4) modern methods of diagnostics of background, precancerous and malignant neoplasms of female genital organs; 5) basic principles of differential diagnosis of background, precancerous and malignant neoplasms of female genital organs; 6) management tactics and basic approaches to treatment of background, precancerous and malignant neoplasms of female genital organs; 6) methods of prevention and rehabilitation of patients with background, precancerous and malignant neoplasms of	II $\alpha$	Individual oral survey. Level II test control. Solution of typical level II problems	Questions for individual verbally poll. Level II test tasks. Typical level II tasks themed tables, posters, models, slides.	15 min.

	female genital organs.				
<b>II. The main stage</b>					
4.	<p>Formation of professional skills and competences:</p> <p>1) work in women's consultations, gynecological department, operating unit;</p> <p>2) master the techniques collecting anamnesis, external and internal gynecological research;</p> <p>3) to supervise a gynecological patient with background, precancerous and malignant neoplasms of female genital organs;</p> <p>4) evaluate and interpret survey results the patient;</p> <p>5) hold a differential diagnostics in patients with precancerous and malignant neoplasms of female genital organs;</p> <p>6) make the diagnosis according to received data;</p> <p>7) identify and justify medical tactics.</p>	III $\alpha$	<p>Practical training</p> <p>Professional training in solution atypical clinical situations</p>	<p>Algorithms for formation practical skills.</p> <p>Gynecological tools for examination gynecological patient. Phantoms. Models.</p> <p>Algorithms for formation professional skills and skills. Patients. Illnesses. Situational atypical tasks Level III.</p>	1h 40 minutes
<b>III. The final stage</b>					
5.	<p>Level control and correction professional skills.</p> <p>Summary of the lesson.</p>	III $\alpha$	<p>Individual control practical skills and theirs results.</p> <p>Analysis and evaluation results clinical work.</p> <p>Level III test control.</p> <p>The solutions are atypical</p>	<p>Gynecological tools.</p> <p>Results clinical examination.</p> <p>Level III test tasks.</p> <p>Atypical level III tasks.</p> <p>Indicative map for</p>	<p>30 min.</p> <p>5 min.</p> <p>15min.</p>
6.	Homework.				

7.			level III tasks.	self work with literature.	
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## VIII. MATERIALS OF METHODOLOGICAL PROVISION OF LESSON:

### 7.1. Control materials for the preparatory stage of the lesson.

Theoretical basics of mastering the topic:

1. What is the anatomical and histological structure of the external and internal genital organs?
2. To give definition of background diseases of female genital organs.
3. What are the main current approaches to the etiopathogenesis of background diseases of the female genital organs.
4. Modern classification of background diseases of female genital organs.
5. What are the current possibilities of diagnosis of background diseases of female genital organs?
6. What should be the medical tactics for the diagnosis of background diseases of the female genital organs, depending on the location and clinical symptoms?
7. To determine the precancerous disease of female genital organs.
8. To name the main reasons contributing to the occurrence of precancerous diseases of female genital organs of different localization.
9. Modern pathohistological, cytomorphological and colposcopic classifications of precancerous diseases of female genital organs.
10. What are the current standards for the diagnosis of precancerous diseases of the female genital organs?
11. Approaches to differential diagnosis of background and precancerous diseases of female genital organs.
12. What should be the medical tactics for diagnosing precancerous diseases of female genital organs?
13. To give definition of malignant neoplasms of female genital organs and trophoblastic disease.
14. What are the main current theories of the emergence and spread of malignant neoplasms of the female genital organs and trophoblastic disease?
15. Modern classification of malignant neoplasms of female genital organs and trophoblastic disease.
16. Basic clinical symptoms of malignant neoplasms of female genital organs depending on localization.
17. The main clinical symptoms of trophoblastic disease.

18. What are the current possibilities for the diagnosis of malignant neoplasms of the female genital organs and trophoblastic disease?
19. What are the requirements of the national protocols for the management and treatment of malignancies of the female genital organs and trophoblastic disease?

Test Control Materials (II $\alpha$ ):

A. Multiple choice test.

List the most common clinical symptoms of cervical cancer

1. There are no clinical symptoms for the initial forms of cervical cancer.
2. Pregnancy.
3. Blood flow from the genital tract.
4. Pathological whites of the genital tract.
5. Dyspeptic manifestations
6. Postnuclear form of anuria.
7. Pain in the lower abdomen.
8. Symptoms of bladder and rectum disorders.
9. Swelling of the lower extremities, which develop with compression of the tumor of venous and lymphatic vessels, which go along the side wall of the pelvis.
10. Development of uremia on the background of chronic renal failure.

B. Test for drawing parallels, establishing logical connections between data groups

Establish a logical link between the following types of Pap smear cytology and their descriptions according to each of these types.

1.	<i>I type</i>	1.	Single cells with changes in the ratio of nuclei to cytoplasm are visualized; cytological or histological examination of cervical biopsy specimen is required to verify the diagnosis
2.	II type	2.	Atypical cells are absent, normal cytological picture
3.	III type	3.	Individual cells with signs of malignancy are visualized, namely, enlarged nuclei, basophilic cytoplasm, and uneven distribution of chromatin.
4.	IV type	4.	Changes in cellular elements are due to the inflammatory process in the vagina and / or cervix
5.	V type	5.	Numerous atypical cells are visualized in the smear

#### Addition test

List the main clinical groups for the dispensary accounting of cancer patients

Ia . \_\_\_\_\_

Ib. \_\_\_\_\_

II . \_\_\_\_\_

III . \_\_\_\_\_

IV . \_\_\_\_\_

#### D. Test to establish the correct sequence

Establish the correct sequence of treatment steps for patients with endometrial hyperplasia

I. Removal of altered endometrium with subsequent morphological examination and determination of further tactics depending on the type of endometrial pathology.

II. Dispensary observation for 5 years after effective hormone therapy and 6 months after surgical treatment (ultrasound of pelvic organs twice a year, see MOH order No. 503 of 28.12.2002).

III. Optimization of hormonal status in order to prevent the development of hyperestrogenemia.

IV. Hormone therapy for endometrial suppression.

## Typical Level II Tasks:

### Problem I.

Sick 40 years old, complained of constant contact with blood flow from the genital tract. Menstrual function is not impaired. History of 3 births, 2 artificial abortions. The first birth with the imposition of obstetric forceps and rupture of the cervix. After the second birth, erosion of the cervix was detected. Examination of the cervix in the speculum and bimanual examination revealed that the cervix is eroded, hypertrophied, deformed by old postpartum tears, the outer eye is gaping. The uterus and appendages without pathological changes, the parameters are free. Suggest an outline for a definitive clinical diagnosis?

Answer

### Task II.

Patient V., 38 years old, consulted a woman for complaints of general weakness, shortness of breath, cough and dark bloodstream within 1 week. History of pregnancies - 3, abortions - 2. During the last artificial abortion for a period of 10 weeks a bubble burst was detected. After 6 months, a cough appeared. Objectively: the condition of the patient of moderate severity. Pulse 98 per minute, blood pressure 100/75 MM Hg The skin and mucous membranes are pale. In the lungs hard breathing is heard over their entire surface, sharply weakened in the lower divisions. The abdomen is soft, painless in all departments. Vaginal examination: external genitalia developed properly; vagina of a woman born; cervical cylindrical shape, outer eye closed; uterus enlarged to 7 weeks of gestation, soft consistency, mobile, painless. Applications are undefined, their area is painless. Allocation of blood, moderate. Chest X-ray: pulmonary fields changed multiple, rounded by small nodes up to 1 cm in diameter.

What is the most likely diagnosis? What will be the tactics of a female counseling doctor?

Answer.



## *7.2 Materials of methodological support for the main stage of the lesson*

<b>№ p / p</b>	<b>Tasks</b>	<b>Sequence of execution</b>	<b>Remarks, warnings about self-control</b>
1.	Survey with external gynecological examination	Follow this sequences: 1) conduct a general examination of the patient; 2) to carry out examination and palpation of mammary glands; 3) to give the patient horizontal position; 4) continue breast palpation; 5) to carry out examination of a stomach; 6) to carry out consecutive palpation of all departments of a stomach, percussion and auscultation.	1. When horizontal the position of the pregnant woman there is a syndrome aorto-forging compression.
2.	Special gynecological examination	Follow this sequences: 1) provide the patient with an appropriate one provisions for internal gynecological study; 2) wear sterile gloves; 3) conduct an examination of the external genitalia; 4) to carry out examination of the vagina and vaginal part of the cervix with the help of gynecological speculum; 5) to conduct a bimanual vaginal examination, determining the state of the vagina, cervix, uterine body and appendages; 6) change the sterile gloves and perform rectal examination.	2. Empty bladder and rectum

### 7.3 Materials of control of the final stage of the class.

#### Classification test

Determine the therapy of choice of treatment for cervical cancer depending on the stage

The stage \ Choice therapy	IA1	IA2	IA2	IV2, IIV-IV
Radical hysterectomy and pelvic lymph node dissection				
Conization / radical trachelectomy				
Combination chemotherapy / radiotherapy with cisplatin				
Connection or simple hysterectomy ± salpingo-oophorectomy and pelvic lymph node dissection				

#### Atypical level III task

##### Task 1.

Patient L., 36 years old, was admitted to the gynecological ward with moderate blood discharge from the vagina. History: heredity is not burdensome; had three pregnancies; one of which ended with childbirth and two with artificial abortions. The last abortion was made 3 years ago (8 weeks) without any complications. Menstrual cycle without pathological changes. In the last 6 months. complains of periodic rare serous-yellow vaginal discharge with unpleasant odor and slight impurities of blood. She did not consulta doctor. Two hours ago, after heavy lifting, suddenly there were significant bleeding from the vagina. Objective examination: overall condition is satisfactory. Pulse 88 beats / min., AT - 110/70 mm Hg. Art., body temperature 36.4 ° C. Sick of the right physique, satisfactory nutrition. The skin and visible mucous membranes are pale. The abdomen is soft, painless. Chair and urination is normal. Examination by means of speculum: the cervix is hypertrophied, barrel-shaped, dark-purple in color, with a pronounced capillary network, fixed. From the cervical canal depart bloodstream. Vaginal research: External genitalia are developed properly. The cervix is very dense, barrel dilated, fixed. The body of the uterus is the usual size. Rectal examination: the maxillary part of the cervix is sharply hypertrophied, dense. In the parameter on both sides of the dense infiltrate reaching the walls of the pelvis.

1. Make a preliminary diagnosis.

2. What are the primary diagnostic methods for verifying the diagnosis?

3. Suggest treatments.

Answer.

Task 2.

Patient N., 65 years old, was admitted to the gynecological department with complaints of pain in her left thigh, especially at night. When defecation, blood is present in the feces. History of asymptomatic uterine leiomyoma, 12 months prior to the menopause period, was recorded at the place of residence; in the words, treatment of leiomyoma was not carried out; postmenopausal period without complaints. 3 months later, she went to the doctor with the above complaints. After examination by the oncologist, symptomatic treatment was prescribed. Data on volume, examination results, and clinical diagnosis are missing. Objective examination: satisfactory when inspected. AT - 180 / 110-160 / 100 mm Hg. Art. Body weight 88 kg, height 158 cm. Suffers from hypertension. Heart tones are muted. Vesicular breathing is elicited in the lungs. The abdomen is soft, painless on palpation. Examination with speculum: The cervix with speculum cannot be examined because of the narrowness of the vagina and tissue infiltration of the front and back walls. Rectal examination: vaginal and rectal walls infiltrated, dense. The body of the uterus is increased to 11 weeks of conditional pregnancy, dense, hilly. In the parameter on both sides infiltrates that reach the walls of the pelvis are palpated.

1. Make a diagnosis. Assign treatment.

2. In such a situation, is it necessary to confirm the diagnosis with histological examination data?

Answer.

#### **7.4 Materials for methodological support of students 'self-preparation (indicative map for organizing students' independent work with educational literature)**

№ p / p	Training tasks	Instructions to the task
1.	Explore: Current approaches to the etiopathogenesis of background and precancerous diseases of the female genital organs	To understand the main etiopathogenetic moments of origin and development of background and precancerous diseases of female genital organs
2.	Modern classifications of background and precancerous diseases of female genital organs	To pay attention to the colposcopic classification of background and precancerous diseases of female genital organs
3.	Modern methods of diagnosis of	To name standard methods of

	background and precancerous diseases of female genital organs	diagnostics of background and precancerous diseases of female genital organs according to the current national clinical protocols
4.	Current approaches to the treatment of background and precancerous diseases of the female genital organs, depending on the localization and clinical symptoms	To pay attention to indications for conservative and surgical treatment of background and precancerous diseases of female genital organs; to know modern, pathogenetically grounded, minimally invasive methods of treatment
5.	The basic modern theories of origin and distribution of malignant neoplasms of female genital organs	To know the basic modern theories of origin and distribution of malignant neoplasms of female genital organs
6.	Modern classification of malignant neoplasms of female genital organs	Know the classification of malignant neoplasms of female genital organs according to MKH-10 and the most common pathohistological classifications
7.	Basic anamnestic, clinical and additional methods of diagnosis of malignant neoplasms of female genital organs	Current possibilities of diagnosis of malignant neoplasms of female genital organs
8.	Current requirements in accordance with national protocols for the management and treatment of malignant neoplasms of female genital organs	Features and approaches to treatment of malignant neoplasms of female genital organs
9.	Basic modern theories of the etiopathogenesis of trophoblastic disease	Know the basic modern theories of the theory of etiopathogenesis of trophoblastic disease
10.	Modern classification of trophoblastic disease	Know the classification of trophoblastic disease according to MKH-10 and the most common pathohistological classifications
11.	Basic anamnestic, clinical and additional methods of diagnostics of trophoblastic disease	Modern possibilities of diagnostics of trophoblastic disease
12.	Current approaches to management and	Features and approaches to the

### VIII. LITERATURE

a) Educational.

Basic:

1. Obstetrics & gynecology : textbook / V. I. Gryshchenko [et al.] ; ed. by.: V. I. Gryshchenko, M. O. Shcherbina. - Kyiv : AUS Medicine Publ. - Vol. 2 : Gynecology. - 2nd ed. - 2018. - 352 p.
2. Gynecology: a textbook / ed. B.M. Wentkivsky, G.K. Stepankivska, M.E. Yarotsky. - K. : VSV Medicine, 2012. - 352 p.
3. Obstetrics and Gynecology: in 4 volumes: national textbook / no. ed. ; in a row. Academician of the National Academy of Medical Sciences of Ukraine, prof. V.M. It is blocked. - Volume 3: Non-surgical gynecology / qty. ed. ; in a row. Acad. NAMS of Ukraine, prof. V.M. It is blocked. - K. : VSV "Medicine", 2014. - 928 p.
4. Obstetrics and Gynecology. Tatarchuk TF, et al. Kiev: Medicine. - 2013.
5. Gynecology: a guide for doctors / VK Likhachev. - Vinnytsia: New Book, 2018. - 688 p.

Additionally:

1. Munro, M.G. Abnormal uterine bleeding. Cambridge: Cambridge University Press (2010).
2. David McKay Hart, Jane Norman. Gynecology. Illustrated clinical guide. - M.: Binom. - 2009. - 463p.
3. Atlas of ultrasound diagnostics in obstetrics and gynecology. Dubile P., Benson K.B. 2009 Publisher: MEDPress-inform.
4. Gynecology. Illustrated clinical guide. Hart JM, Norman J. 2009 Publisher: Binom.
5. A guide to practical skills in gynecology, obstetrics and neonatology / Ed. prof. AND I. Senchuk. - K. : Hydromax, 2006. - 368s.
6. Order of the Ministry of Health of Ukraine No. 676 of December 31, 2004. "On approval of clinical protocols on obstetric and gynecological care."
7. Electronic document "Adapted clinical guidelines based on evidence of" Abnormal uterine bleeding ", 2016.
8. National consensus on the management of patients with abnormal uterine bleeding of the Association of Gynecologists and Endocrinologists of Ukraine. Reproductive endocrinology. 2015; 1 (21): 8-12.
9. Order of the Ministry of Health of Ukraine No. 554 of September 17, 2007 (as amended - Order of the Ministry of Health of Ukraine No. 645 of July 30, 2010, No. 247 of April 29, 2011) On approval of protocols for the provision of medical care in the specialty "Oncology" (vulvar cancer, endometrial cancer, cervical cancer, ovarian cancer, trophoblastic pregnancy).

10. Order of the Ministry of Health of Ukraine No. 645 of 30.07.2010 On amendments to the order of the Ministry of Health of Ukraine of 17.09.2007 No. 554 "On approval of protocols of rendering medical care in the specialty" Oncology "(breast cancer)

11. Ministry of Health of Ukraine Order No. 582 of December 15, 2003 "On approval of clinical protocols on obstetric and gynecological care."

12. Order of the Ministry of Health of Ukraine No. 236 of 02.04.2014 On approval and implementation of medical and technological documents on standardization of medical care in dysplasia and cervical cancer

13. Pavlyuchenko MI, Slinko OM Precancerous and malignant neoplasms in gynecology. Tutorial. (Approved at the meeting of the Central Methodical Council of ZSMU, Minutes No. 6 of May 20, 2015) .- Zaporizhzhya.-2015.-92 p.

b) Methodical.

1. Kazakov VM, Vitenko IS, Talaenko OM, Kamenetsky MS, Pervak MB, Kotlubey OV Development of methodological guidelines for students of higher medical educational establishments in accordance with modern state standards and principles of the Bologna process (Methodical recommendations for teachers of higher medical educational establishments of IY accreditation level): Kyiv-Donetsk: CMKMOZ of Ukraine, 2005.-158 p.

2. Miller VE Methodical bases of preparation and carrying out of educational employment in medical universities (manual): - Kyiv, Khreschatyk, 2006. - 80 p.

## **INFLAMMATORY DISEASES OF FEMALE GENITAL ORGANS**

### **I. SCIENTIFIC AND METHODOLOGICAL RATIONALE OF THE THEME (UPDATE):**

For the logical combination of information on the anatomy of the female genital organs, pathological physiology, microbiology, as well as to facilitate the development of the topic should cover the issues of topography, blood supply, innervation of the external and internal genital organs, etiology, pathogenesis of inflammatory processes.

It should be emphasized (presentations, guidelines) that the pathways for the spread and spread of non-specific and specific infection may be different.

Much attention is paid to clarifying the risk factors for the inflammatory process in the gynecological anamnesis. The main complaints are: itching, burning in the external genital area, white, pain, fever, general weakness, malaise, impaired function of adjacent organs.

When collecting anamnesis, the main violations of menstrual, reproductive and sexual functions in inflammatory diseases of female genital organs are found out.

Involving students to work on the phantom, it is necessary to pay attention to possible deviations in special gynecological examination (hyperemia, swelling of external genitals, presence of abnormal vaginal discharge; accumulation of secretions in the posterior crypt or presence of abnormal secretions from the cervical canal when viewed in the gynaecological speculum; enlargement; uterus, violation of its position, mobility, tenderness, the presence of formations in the field of uterine appendages in bimanual study). It is necessary to emphasize the value of these deviations when determining the localization of the inflammatory process.

When studying special methods, pay attention to the special importance of this knowledge in the activity of the doctor at diagnosis. Additional methods include bacterioscopic examination of sexual excretions, ultrasound diagnosis, hystero- and laparoscopy. For the diagnosis of tuberculosis, methods such as blood sampling on BC, Mantoux, Koch test, chest X-ray are of particular importance. The teacher shows in clinical examples the use of special methods of examination, which in each case determine the etiology and localization of inflammatory diseases of the genital organs, a group of antibiotics that can be used for the treatment of various specific infections (gonorrhoea, candidiasis, trichomoniasis and tuberculosis).

Starting to study the treatment of inflammatory diseases of the genital organs, it is necessary to mention medications that affect the various stages of the inflammatory process. To substantiate tactics of management of patients with inflammatory diseases of genitals: conservative and operative.

Be sure to discuss the main indications for surgical treatment of patients with pelvic inflammatory processes in an emergency:

- threat of rupture of the piosalpinx
- Pelvioperitonitis without positive dynamics from conservative therapy for 24 hours
- spilled peritonitis

As planned:

- Suspicion of ovarian formation with signs of inflammation
- Infertility on the background of chronic inflammatory process
- long-term chronic inflammatory process without positive dynamics from conservative therapy.

The possibility of prevention of inflammatory diseases of the genital organs of nonspecific and specific etiology is emphasized: culture of sexual life, intimate hygiene, contraception, timely detection of patients with tuberculosis.

Particular attention is paid to the curation of gynecological patients with inflammatory diseases of the genital organs, with subsequent examination of patients.

## II. LEARNING OBJECTIVES:

### 1.1 The student should know ( $\alpha$ -II):

- anatomical structure of external and internal genital organs
- etiology, features of pathogenesis of acute and chronic inflammatory diseases;
- epidemiology, ways of transmission of pathogens in the inflammatory process of female genital organs;
- modern classification of inflammatory diseases of female genital organs;
- main symptoms and clinical picture at different localization of inflammatory processes of female genital organs;
- modern methods of diagnostics of inflammatory processes of female genital organs;
- methods of prevention of non-specific and specific inflammatory diseases of female genital organs, ways of spreading the inflammatory process.
- basic principles of treatment of non-specific inflammatory diseases of female genital organs;
- treatment of major sexually transmitted infections (STIs) and tuberculosis.

### 1.2 The student must be able to ( $\alpha$ -III):

To master the skills:

- collection of general and special medical history;
- general examination of the patient;
- conducting a special gynecological examination;
- taking smears from the urethra, cervical canal, vagina, and rectum;
- take material for bacteriological and virological studies;
- conduct a bimanual (abdominal-vaginal examination);



- on the basis of the general and special examination of the patient to correctly diagnose and choose treatment tactics.

### III. PURPOSE OF PERSONAL DEVELOPMENT (EDUCATIONAL OBJECTIVE):

To educate students about the importance of the problem of inflammatory diseases of the female genital organs, which have a high percentage of population prevalence, tendency to chronic process and development of complications. Consider also the significant disorders of the menstrual and reproductive function of the female body, which develop as complications of the inflammatory process of internal female genital organs. To deepen the students' understanding of the importance of medical ethics and deontology at

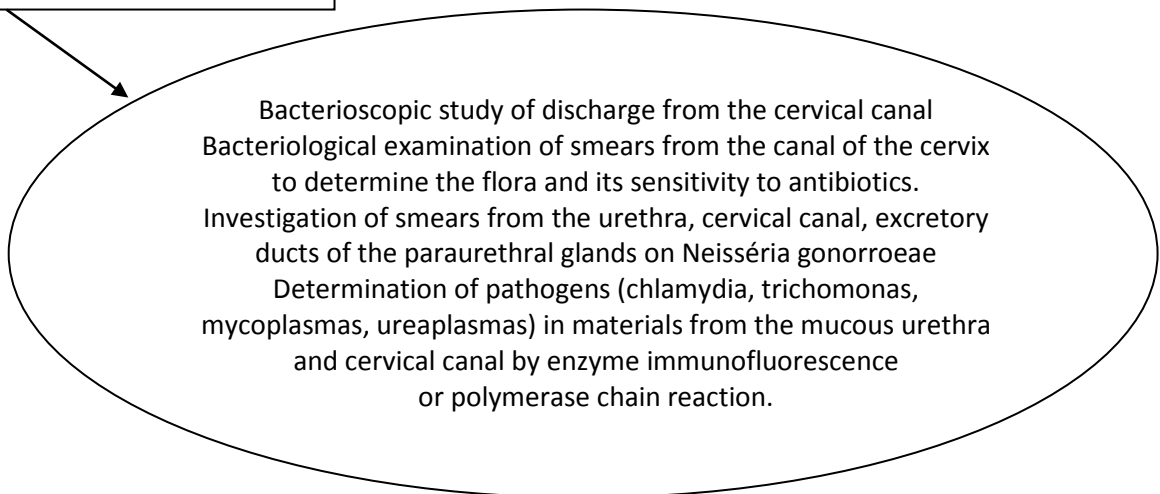
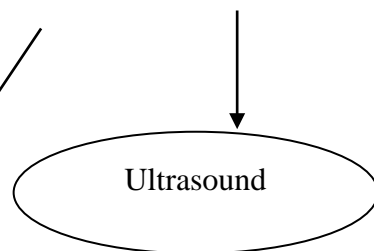
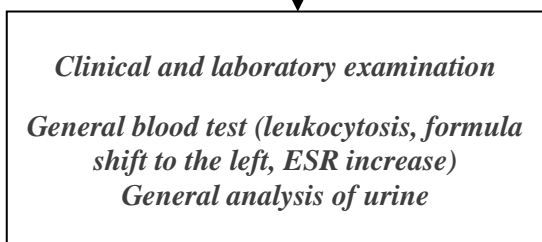
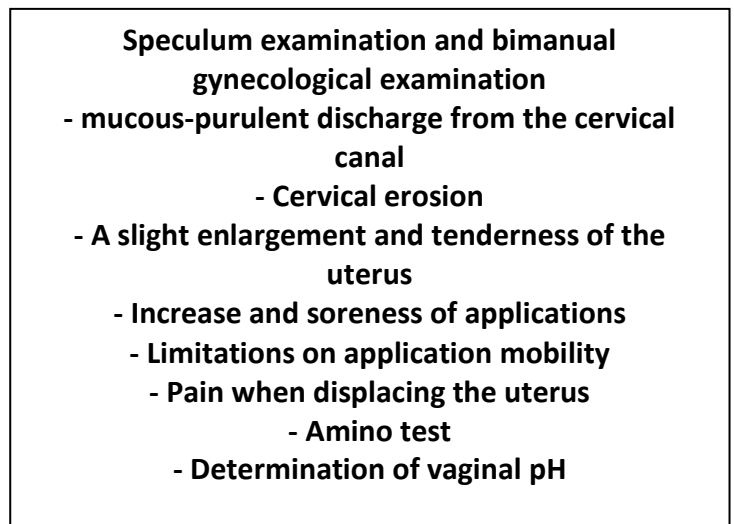
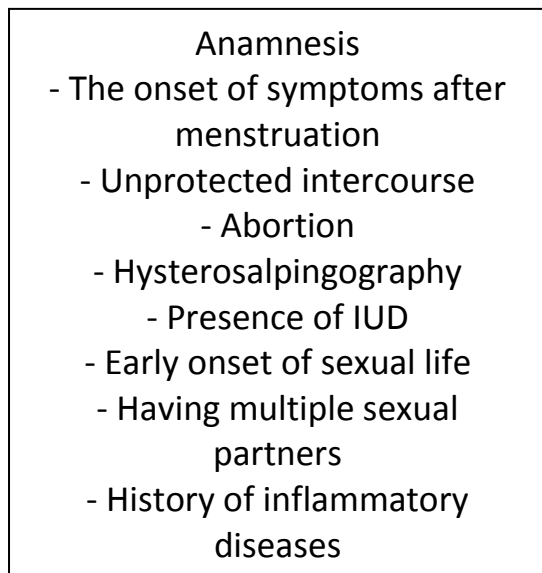
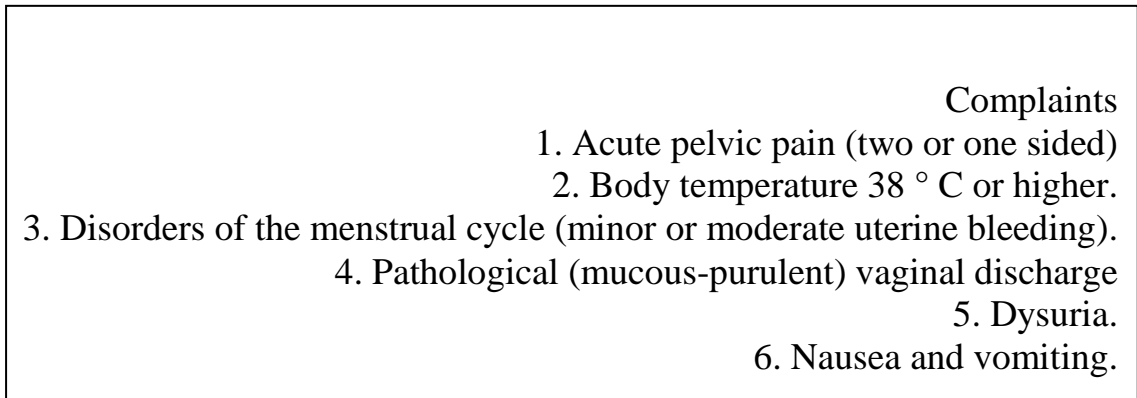
communication with patients. To continue developing students' sense of professional responsibility for their own actions and the fate of the patient. To master the ability to deepen psychological contact with the gynecological patient. In order to strengthen self-awareness, pay attention to the contribution of domestic and foreign scientists to the study of inflammatory diseases of female genital organs.

#### IV. Interdisciplinary integration

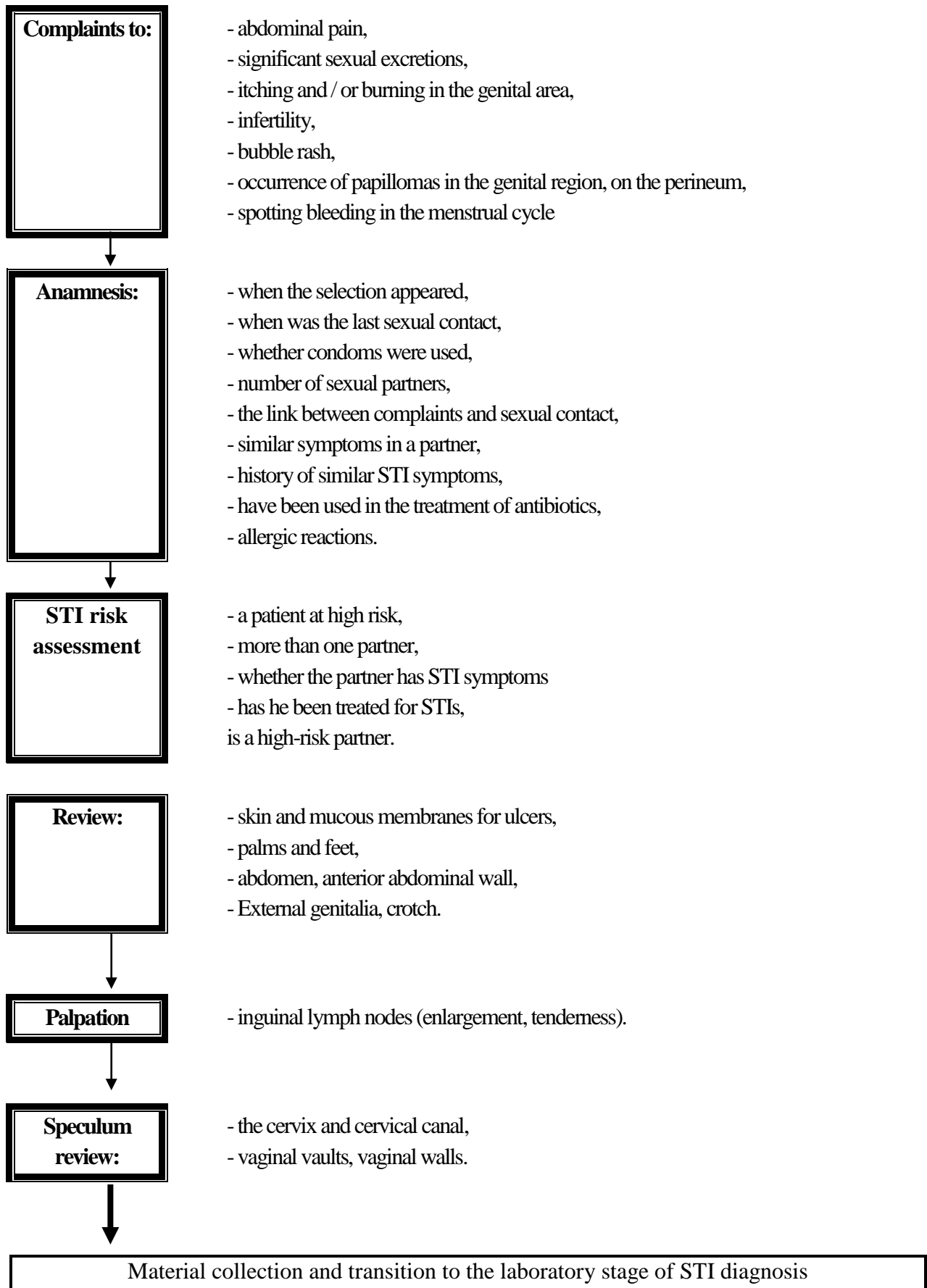
Discipline	To Know	To Be Able
<b>I. Previous disciplines (providing):</b>		
History of medicine	- contribution of domestic and foreign scientists to study the problem of inflammatory diseases of female genital organs	
Human anatomy and topographic anatomy	- structure of external genitals; - structure of internal genitals;	- to interpret information about the structure female genital organs, age differences of the genital organs
<b>II. The following disciplines (providing):</b>		
Surgery, urology	- possible complications arising from the spread of the inflammatory process	- diagnose complications on the part of adjacent authorities
<b>III. Intra-curricular integration:</b>		
Differential diagnosis of inflammatory diseases of the upper and lower parts of female genital organs	- classification of inflammatory diseases of female genital organs - major complaints and clinical manifestations	- by means of the given classification to specify criteria of differential diagnostics of inflammatory diseases of the upper and lower divisions of female genital organs
Principles of examination of women with inflammatory diseases of female genital organs	- algorithm for examination of women with inflammatory diseases of female genital organs	- Demonstrate the methodology of external and internal gynecological examination
Ultrasound in the diagnosis of inflammatory processes of the upper division of the female genital organs	- the main criteria of ultrasound diagnostics	- demonstrate the possibilities of ultrasound examination in the office of functional diagnostics

Laparoscopy as a method of diagnosis and treatment of inflammatory volumetric neoplasms of the uterus	-main indications for laparoscopic intervention	- to demonstrate the basic stages of laparoscopic examination on the model
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## V. CONTENTS OF THE TOPIC: STRUCTURAL-LOGICAL SCHEME OF LESSON



## An algorithm for clinical examination of women with STIs



## **VI. PLAN AND ORGANIZATIONAL STRUCTURE OF THE LESSON:**

№ p / n	The main stages of the lesson, their functions and content	Levels of assimilation	Learning control methods	Methodological support materials	Time min.
<b>I. Preparatory stage</b>					
1. 2. 3.	<p>Organization of classes</p> <p>Setting educational goals and motivation</p> <p>Output level control knowledge, skills, ability:</p> <p>1) contributing reasons development of inflammatory diseases of female genital organs and etiopathogenesis of specific and nonspecific inflammatory diseases of female genitals;</p> <p>2) modern classification of inflammatory diseases of female genital organs;</p> <p>3) the main symptoms and clinical picture of inflammatory diseases of female genital organs of different localization;</p> <p>4) modern methods of diagnosis of inflammatory diseases of female genitals;</p> <p>5) basic principles of treatment of non-specific inflammatory diseases of female genital organs;</p> <p>6) methods for the prevention and treatment of sexually transmitted infections.</p>	II $\alpha$	<p>Individual oral questioning.</p> <p>Test control</p> <p>Level II.</p> <p>Solution typical tasks</p> <p>Level II</p>	<p>Methodical development</p> <p>Questions for individual verbally poll.</p> <p>Level II test tasks.</p> <p>Typical level II tasks themed tables, posters, models, slides.</p>	15min.  1hour 15min.
<b>II. The main stage</b>					
4.	<p>Formation of professional skills and competences:</p> <p>1) work in women's consultations, gynecological department, operating unit;</p>	III $\alpha$	Practical training	<p>Algorithms for formation practical skills.</p> <p>Gynecological</p>	1hour 40min.

	<p>2) master the techniques collecting anamnesis, external and internal gynecological research;</p> <p>3) to supervise a gynecological patient with inflammatory disease of the external or internal genital organs;</p> <p>4) evaluate and interpret survey results the patient;</p> <p>5) hold a differential diagnostics in patients with specific and non-specific infection;</p> <p>6) make the diagnosis according to received data;</p> <p>7) identify and justify medical tactics.</p>	III $\alpha$	<p>Professional training in solution atypical clinical situations</p>	<p>tools for examination gynecological patient. Phantoms. Models. Algorithms for formation professional skills and skills. Patients. Illnesses. Situational atypical tasks Level III.</p>	
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### III. The final stage

5.	Level control and correction professional skills.	III $\alpha$	<p>Individual control practical skills and theirs results. Analysis and evaluation results clinical work. Level III test control.</p>	<p>Gynecological tools. Results clinical examination. Level III test tasks. Atypical level III tasks.</p>	30min.
6.	Summary of the lesson.		<p>The solutions are atypical level III tasks.</p>	<p>Indicative map for self work with literature.</p>	5 min.
7.	Homework.				15min.

## VIII. MATERIALS OF METHODOLOGICAL PROVISION OF LESSON:

7.1. Control materials for the preparatory stage of the lesson.

Theoretical basics of mastering the topic:

1. To determine the inflammatory process of the female genital organs.
2. What is the anatomical and histological structure of the external and internal genital organs?
3. What are the main causes contributing to the development of the inflammatory process of female genital organs?
3. The main causative agents and etiopathogenesis of the inflammatory process of female genital organs.
4. Classification of inflammatory diseases of female genital organs.
5. What are the features of the course of the disease in the specific and nonspecific inflammatory process of female genitals?
6. What are the main diagnostic features of the inflammatory process of the external and internal genitals?
7. What should be the medical tactics in diagnosing the inflammatory process of the external and internal genitals?

Test Control Materials (II $\alpha$ ):

A. Multiple choice test.

Specify risk factors for female genital inflammation

1. Age of the patient.
2. Anomalies of development of female genital organs.
3. Early onset of sexual life.
4. Having multiple sexual partners.
5. Intrauterine method of contraception (IUD).
6. A history of surgery data in the abdomen.
7. The presence of inflammatory processes of the pelvic organs (the patient or her partner).
8. Benign ovarian or uterine tumors.
9. Bacterial vaginosis.
10. Uncontrolled use of antibacterial drugs.
11. Extragenital pathology.

B. Test for drawing parallels, establishing logical connections between data groups

Establish a logical connection between the following antibacterial drugs used in the treatment of inflammatory processes of the female genital organs and the most common infection in gynecological practice



1.	1.Azithromycin	Candida albicans
2.	2.Clarithromycin	Trichomonas vaginalis
3.	3.Doxycycline	Gardnarella vaginalis
4.	4.Triazole (fluconazole)	Micoplasma genitalium
5.	5.Ofloxacin	Ureaplasma urealiticum
6.	6.Metronidazole	Neisseria gonorrhoea
7.	7.Ceftriaxone	Chlamydia trachomatis

#### B. Addition test

Specify basic clinical criteria for sepsis (systemic inflammatory response syndrome)

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

#### D. Test to establish the correct sequence

Establish the correct sequence of the algorithm of examination of patients with pelvic inflammatory diseases

1. Collection of anamnesis
2. Ultrasound examination
3. Clinical and laboratory examination
4. Diagnostic laparoscopy
5. Finding out complaints
6. Examination in speculum and bimanual gynecological examination
7. Bacteriological examination
8. Medical measures

Typical Level II Tasks:

##### Problem I.

Patient B., 26 years old, was admitted to a gynecological clinic with complaints of abdominal pain, general weakness, fever up to 39 Co, purulent-purulent discharge from the genital tract. Medical history: a week ago she underwent a medical abortion. Gynecological diseases are denied for medical abortion. Menstrual function is not impaired. History of 2 physiological childbirth. Gynecological examination: Cervical cylindrical shape, yawn closed. The uterus in the correct position, enlarged to 5 weeks of pregnancy, soft consistency, painful, appendages without palpatory

changes, after examination there were minor bleeding and. What is the preliminary diagnosis, examination plan, treatment?

Answer.

Task 2.

Patient K., 21 years old, was admitted to the gynecological department with complaints of constant abdominal pain, fever, purulent discharge from the genital tract. The deterioration of the condition notes within two weeks after casual sex. Objective: medium severity, body temperature 37.6<sup>0</sup>C, heart rate - 84 beats / min, blood pressure 110/70. The abdomen is soft, not swollen, a slightly positive symptom of Shchotkin-Blumberg in the lower divisions. In vaginal examination: Cervical cylindrical, around the external opening of the cervical canal hyperemia, swelling of the epithelium, purulent discharge. The body of the uterus is slightly enlarged, painful on palpation. Thick painful tubes are palpated on both sides. Vaginal arches are deep, loose. Establish a diagnosis, a plan of examination to clarify the etiology of the process, a plan of treatment.

Answer:

## 7.2 Materials of methodological support for the main stage of the lesson

№ p / p	Tasks	Sequence of execution	Remarks, warnings about self-control
1.	Survey with external gynecological examination	Follow this sequences: 1) conduct a general examination of the patient; 2) to carry out examination and palpation of mammary glands; 3) to give the patient horizontal position; 4) continue breast palpation; 5) to carry out examination of a stomach; 6) to carry out consecutive palpation of all departments of a stomach, percussion and auscultation.	1. When horizontal the position of the pregnant woman there is a syndrome aorto-forging compression.
2.	Special gynecological examination	Follow this sequences: 1) provide the patient with an appropriate one provisions for internal gynecological study; 2) wear sterile gloves; 3) conduct an examination of the external genitalia; 2) to study the vagina and vaginal part of the cervix using gynecological speculum; 3) conduct a bimanual vaginal examination, determining the state of the vagina, cervix, uterus and appendages.	2. Empty bladder and rectum

### 7.3 Materials of control of the final stage of the class.

#### Classification test

**Determine classification of septic complications based on clinical symptoms and laboratory examination data**

Septic complications  Clinical symptoms and laboratory data	Systemic inflammatory response syndrome (Systemic Inflammatory Response Syndrome - SIRS)	Sepsis	Severe sepsis	Septic shock
Body temperature greater than 38 ° C or below 36 ° C				
Heart rate exceeding 90 beats / min.				
Respiratory rate exceeding 20 per minute or Ra CO <sub>2</sub> below 32 mm Hg				
Leukocyte count greater than 12,000 / mm <sup>3</sup> , less than 400 / mm <sup>3</sup> or more than 10% of young forms				
Infection confirmed by bacteriological examination				
Clinical condition accompanied by organ dysfunction, hypoperfusion or hypotension				
A condition induced by hypotension that cannot be corrected by adequate fluid replenishment; perfusion disorders, which may include acidosis, oliguria, or acute mental illness.				

### Atypical level III task

#### Task 1.

Patient R., 30 years old, was admitted to a gynecological clinic with complaints of moderate abdominal pain, especially after exercise, periodic moderate vaginal discharge. The above mentioned complaints have been noted over the last 2 years. Repeatedly referred to a gynecologist, conducted anti-inflammatory treatment in a women's consultation, with the condition improved by 2-3 weeks. Sex life of 18 years without the use of contraception. History of 1 physiological birth, 2 medical abortions in the period from 8-12 weeks. Objectively: the skin and visible mucous are pale pink in color. Palpator belly is soft, painful in the lower parts, symptoms of peritoneal irritation are negative. Gynecological status: external genitalia without pathological changes. The cervix is cylindrical in shape, deformed by postpartum ruptures. The uterus is slightly enlarged in size, dense, restricted in mobility, painless. Arches shortened, left appendages increased in size, painful; right ovary enlarged in size, painful, palpable fallopian tube 3x8 cm in size. Sexual discharge subtle, moderate.

1. What is the most likely diagnosis?
2. What is the tactic of managing this patient? Answer:

#### Task 2.

Patient V., 37 years old, was admitted to the gynecological clinic with complaints of abdominal pain, frequent urination, painful act of defecation, general weakness, fever, nausea, single vomiting. From the anamnesis: the last 2 months have noted periodic aching pain in the lower abdomen, the above complaints appeared acutely, after a cold. Anamnestic: 2 pregnancies culminating in the birth of healthy children. 10 years ago, an intrauterine spiral was installed for the purpose of concentration. Disorders of menstrual function denies living a sexual life without the use of barrier methods of contraception. Objectively: no pathology was detected by internal organs. Skin and visible mucous pale, tongue dry, pulse 120 beats. in minutes The abdomen is soft in the epigastric region, the tension of the rectus abdominal muscles over the womb, there is also pain on palpation, a positive symptom of peritoneal irritation. Gynecological status: External genitalia formed correctly. The vaginal mucosa is pale pink in color, the cervix is cylindrical in form of hypertrophied, in the speculum: multiple cysts of the cyst, the control threads of the intrauterine spiral are visualized. The uterus is slightly enlarged, declined to the left, restricted to moving, painful. Case palpable formation size 8x8x6 cm, sharply painful, dense consistency, limited mobility. Left appendages are not clearly defined in the adhesions. The mucous secretions.

1. What is the clinical diagnosis?
2. Tactics of patient management.

Answer:

**7.4 Materials for methodological support of students 'self-preparation  
(indicative map for organizing students' independent work with educational  
literature)**

№ p / p	Training tasks	Instructions to the task
1.	Explore: the most significant factors contributing to the development of nonspecific and specific inflammatory diseases of the female genital organs	Understand the most important factors contributing to the development of non-specific and specific inflammatory diseases of the female genital organs
2.	the most common classifications of inflammatory diseases of the female genital organs	Pay attention to the classifications given in MKH-10 and those used in foreign scientific sources
3.	modern methods of diagnostics of inflammatory diseases of female genital organs	To name standard methods of diagnostics of inflammatory diseases of female genital organs in accordance with the current national clinical protocols
4.	modern approaches to the treatment of inflammatory diseases of the female genital organs	In addition to get acquainted with the main groups of antibacterial drugs used in the treatment of inflammatory diseases of the female genital organs
5.	basic physiotherapeutic methods of treatment of inflammatory diseases of female genital organs and terms of their application	To know the method of using the basic physiotherapeutic methods of treatment of inflammatory diseases of female genital organs
6.	Current approaches to rehabilitation of patients with chronic inflammatory diseases of female genital organs	Possibilities of sanatorium and health improvement of patients with chronic

		inflammatory diseases of female genital organs
7.	Basic principles of diagnosis and treatment of female genital tuberculosis.	Features of diagnosis of tuberculosis of female genital organs.

## VIII.

### a) Educational.

#### Basic:

1. Obstetrics & gynecology : textbook / V. I. Gryshchenko [et al.] ; ed. by.: V. I. Gryshchenko, M. O. Shcherbina. - Kyiv : AUS Medicine Publ. - Vol. 2 : Gynecology. - 2nd ed. - 2018. - 352 p.
2. Gynecology: a textbook / ed. B.M. Wentkivsky, G.K. Stepankivska, M.E. Yarotsky. - K. : VSV Medicine, 2012. - 352 p.
3. Obstetrics and Gynecology: in 4 volumes: national textbook / no. ed. ; in a row. Academician of the National Academy of Medical Sciences of Ukraine, prof. V.M. It is blocked. - Volume 3: Non-surgical gynecology / qty. ed. ; in a row. Acad. NAMS of Ukraine, prof. V.M. It is blocked. - K. : VSV "Medicine", 2014. - 928 p.
4. Obstetrics and Gynecology. Tatarchuk TF, et al. Kiev: Medicine. - 2013.
5. Gynecology: a guide for doctors / VK Likhachev. - Vinnytsia: New Book, 2018. - 688 p.

#### Additionally:

1. Obstetrics and gynecology: diagnosis and treatment. Tutorial. In 2 volumes. DeCherney A.H., Nathan L. 2009 Publisher: MEDpress-inform
2. Atlas of ultrasound diagnostics in obstetrics and gynecology. Dubile P., Benson K.B. 2009 Publisher: MEDPress-inform.
3. Gynecology. Illustrated clinical guide. Hart JM, Norman J. 2009 Publisher: Binom.
4. Outpatient care in gynecology / ed. V.A. Beniuk // Gynecologist doctor's guide. - 2nd ed., Suppl. - K. : Publishing House "Health of Ukraine", 2010. - 462 p. - (The series "Library" Health of Ukraine ).
5. A guide to practical skills in gynecology, obstetrics and neonatology / Ed. prof. AND I. Senchuk. - K. : Hydromax, 2006. - 368s.
6. Order of the Ministry of Health of Ukraine No. 676 of December 31, 2004. "On approval of clinical protocols on obstetric and gynecological care."
7. Ministry of Health of Ukraine Order No. 582 of December 15, 2003 "On approval of clinical protocols on obstetric and gynecological care."
8. Pavlyuchenko MI, Slinko OM Postpartum purulent-septic complications. Tutorial. (Approved at the meeting of the Central Methodical Council of ZSMU, Minutes No. 5 of May 15, 2014) - Zaporizhzhya.-2014.-105 p.

### b) Methodical.

1. Kazakov VM, Vitenko IS, Talaenko OM, Kamenetsky MS, Pervak MB, Kotlubey OV Development of methodological guidelines for students of higher medical educational establishments in accordance with modern state standards and principles of the Bologna process (Methodical recommendations for teachers of higher medical



educational establishments of IY accreditation level): Kyiv-Donetsk: CMKMOZ of Ukraine, 2005.-158 p.

2. Miller VE Methodical bases of preparation and carrying out of educational employment in medical universities (manual): - Kyiv, Khreschatyk, 2006. - 80 p.

## "ACUTE" ABDOMEN SYNDROME IN GYNECOLOGY

### I. SCIENTIFIC AND METHODOLOGICAL RATIONALE OF THE TOPIC (UPDATE):

"Acute abdomen" is a complex set of symptoms in which the leading symptom is sudden pain in any department of the abdomen and clinical or laboratory signs of external or intra-abdominal bleeding, accompanied by peritoneal symptoms and pronounced changes in the patient's condition. The doctor of any specialty may encounter such a situation. Particularly often it is necessary to carry out differential diagnostics between gynecological and surgical pathology. Fast and correct diagnosis, taking organizational measures, conducting qualified treatment, as a rule, surgery, save the life of the patient.

Gynecological diseases that occur with the symptom complex "acute abdomen" can be divided into three groups:

- 1) diseases accompanied by intraperitoneal bleeding (ectopic pregnancy, ovarian apoplexy, rupture of the ovarian cyst capsule). In this group of diseases disorders of the general condition of the patient proceeds in the type of acute blood loss;
- 2) diseases associated with impaired blood supply to the organs and its necrosis (torsion of the leg of a cyst or ovarian tumor, torsion of the legs and necrosis of the myomatous node). The general reaction of the organism in this group of diseases in the beginning is manifested by a violation of hemodynamics, and in later hours of the disease - a general intoxication syndrome due to tissue necrosis;
- 3) acute inflammatory processes of internal genital organs at which peritonitis develops (piousalpink, piovar, tubo-ovarian abscess). In this group of diseases the general reactions of an organism in the form of intoxication and disturbances of water-electrolyte metabolism prevail.

To logically combine the information obtained from the anatomy, physiology of the female genital organs, as well as to facilitate the development of this topic, the issues of the structure of the external and internal genital organs should be highlighted, their topography, blood supply, innervation, ligamentous apparatus of the uterus should be paid attention.

The topography of the organs is studied on the model of the internal genital organs, pathological changes in which can cause the development of the syndrome of "acute abdomen", the possible localization of the processes causing the appearance of the symptom complex.

The teacher pays great attention to clarifying the risk factors for the development of this symptom complex, collecting anamnesis. Anamnesis is the first and most important step in the examination of a patient. Yes, a patient's age can completely rule out any disease (such as ectopic pregnancy). The history of appendectomy excludes appendicitis. The opening of the abdominal cavity in the past may indicate

the possibility of adhesive disease or intestinal obstruction, "ulcerative" history - of perforative peritonitis, etc. When collecting anamnesis it is also necessary to find out whether a patient has a sexual life, how she protects against unwanted pregnancy, or uses methods of intrauterine contraception (the use of the latter is a factor for the development of inflammatory diseases, as well as ectopic pregnancy).

Usually, an acute abdominal clinic is short-lived, but it is important to find out what the patient's condition and state of health was before she felt sick, from which symptom the disease began, and to what the patient attributes the disease.

Involving students to work on the phantom, attention should be paid to deviations in special gynecological examination (size, location and tenderness of the body of the uterus and appendages, the presence of volumetric formations topographically related to the body of the uterus and appendages, shortening and tenderness of the vaginal arches, displacement of the uterus forward, back, right, left) and emphasize the value of these concepts when diagnosed.

When studying special methods of research, it is necessary to point out their social significance in the diagnosis. Additional methods include ultrasound scan, abdominal puncture through the posterior arch, diagnostic laparoscopy.

The teacher shows by clinical examples the use of special methods of examination, which allow in each case to clarify and determine the diagnosis manifesting the syndrome of "acute abdomen".

Particular attention is paid to the curation of gynecological patients with acute abdominal syndrome, complaints collection, medical history, special examination, additional methods of examination, volume of operations used, preoperative preparation and tactics of post-operative period management, with subsequent examination of their patients.

## II. LEARNING OBJECTIVES:

### 2.1 The student should know ( $\alpha$ -II):

- topographic anatomy of female internal genital organs;
- identification of the main causes contributing to the occurrence of acute abdominal syndrome in gynecology;
- etiopathogenesis of various clinical conditions manifesting in acute abdominal syndrome;
- topographic and clinical classification of ectopic (ectopic) pregnancy;
- the main clinical signs of acute abdominal syndrome;
- principles of differential diagnostics of different conditions manifesting an acute abdomen clinic;
- current standards for the diagnosis of ectopic pregnancy and other pathological conditions with acute abdominal syndrome;

- tactics of providing first aid to patients with ectopic pregnancy, depending on the localization and other pathological conditions with acute abdominal syndrome;
- indications for conservative management of patients with ectopic malignancy and ovarian apoplexy;
- the main modern types of surgery in patients with acute abdominal syndrome and indications for their use.

1.2 The student must be able to ( $\alpha$ -III):

To master the skills:

- collection of general and special medical history;
- to find out the patient's complaints, the time of their occurrence and their dynamics over time;
- general examination of the patient;
- conducting a special external gynecological examination, assessing the condition of the abdominal organs through the anterior abdominal wall (symptoms of peritoneal irritation);
- Perform examination with gynecological speculum to take smears from the urethra, cervical canal, vagina, and rectum;
- internal gynecological examination (abdominal-vaginal examination, abdominal-rectal);
- technique of carrying out a puncture of an abdominal cavity through a back arch;
- based on the data of the special gynecological examination of the patient and the results of the additional examination, correctly diagnose and choose the tactics of treatment;
- to know the rules of preoperative preparation and tactics of conducting the postoperative period;
- know the principles of surgery, surgical approaches used to treat diseases that are accompanied by the development of acute abdominal syndrome.

III. PURPOSE OF PERSONAL DEVELOPMENT (EDUCATIONAL OBJECTIVE):

To educate students about the importance of acute abdominal syndrome, timely intrasyndrome and differential diagnosis of this pathology, the need for doctors to have the skills to provide emergency medical care. Pay particular attention to the risk to patients' lives in violation of the principles of timeliness of diagnosis and treatment; first of all, the states that manifest intraperitoneal bleeding. Pay special attention to preventive examinations for the prevention of diseases related to impaired blood supply and necrosis of the internal genital organs (torsion of the cyst or ovarian tumor, torsion of the legs and necrosis of the myomatous node), acute inflammatory processes of the internal genital organs, tubo-ovarian abscess). To deepen the students' understanding of the importance of medical ethics and deontology at

communication with patients with suspected and verified acute abdominal syndrome. To continue developing students' sense of professional responsibility for their own actions and the fate of the patient. To master the ability to deepen psychological contact with the gynecological patient. In order to strengthen self-awareness, pay attention to the contribution of domestic and foreign scientists to the study of conditions that manifest as a syndrome of "acute abdomen".

#### IV. Interdisciplinary integration

<b>Discipline</b>	<b>Know</b>	<b>Be able</b>
<b>I. Previous disciplines (providing):</b>		
History of medicine	- contribution of domestic and foreign scientists to study the problem of "acute abdomen" in gynecology	- to interpret information about the structure
Human anatomy and topographic anatomy	- structure of external genitals; - structure of internal genitals	female genital organs, age differences of the genital organs
<b>II. The following disciplines (providing):</b>		
<b>Surgery, urology</b>	- modern principles and possibilities of differential diagnosis in acute abdominal syndrome in gynecology and in acute surgical pathology	- be able to carry out according to anamnestic, clinical, laboratory data and the results of additional methods of examination, differential diagnosis between acute abdominal syndrome in gynecology and in acute surgical pathology
<b>III. Intra-curricular integration:</b>		
Differential diagnosis of acute gynecological conditions manifesting the	- a list of gynecological diseases manifesting "acute abdominal	- specify the criteria for differential diagnosis in acute abdominal syndrome

same clinical symptoms Principles of examination of women with acute abdominal syndrome	syndrome" - basic anamnestic data, complaints and clinical manifestations in diseases of different localization - algorithm for examination of women with acute abdominal syndrome	in gynecology - demonstrate the methodology of external and internal gynecological examination
Ultrasound in the diagnosis of diseases with acute abdominal syndrome	- the main criteria of ultrasound diagnostics	- to demonstrate the possibilities of ultrasound examination in the office of functional diagnostics
The importance of laparoscopy and hysteroscopy in the diagnosis and treatment	-main indications for laparoscopic and hysteroscopic examination	- to demonstrate the main stages of laparoscopic and hysteroscopic examination on the model

## V. TABLE OF CONTENTS OF LESSON: STRUCTURAL-LOGICAL SCHEME OF EMPLOYMENT

Classification of ectopic pregnancy.

1. For MKH-10:

O00 Abdominal (abdominal) pregnancy

O00.1 Tubal pregnancy

Pregnancy in the fallopian tube

Uterine tube rupture due to pregnancy

Pipe abortion

O00.2 Ovarian pregnancy

O00.8 Other forms of ectopic pregnancy

Cervical

Combined

In the uterus

Intrauterine

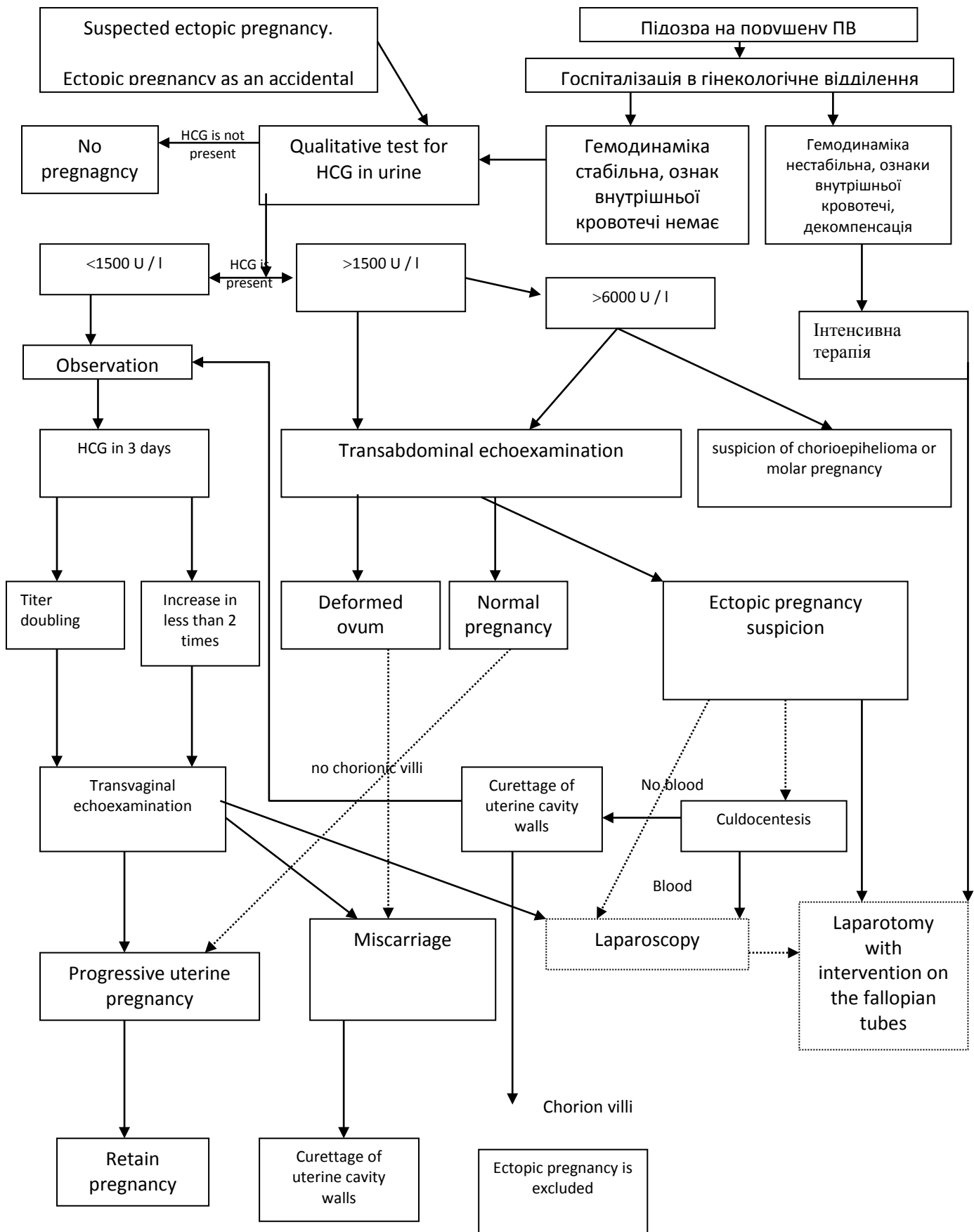
In the uterine mesentery

O00.9 Ectopic pregnancy is unspecified

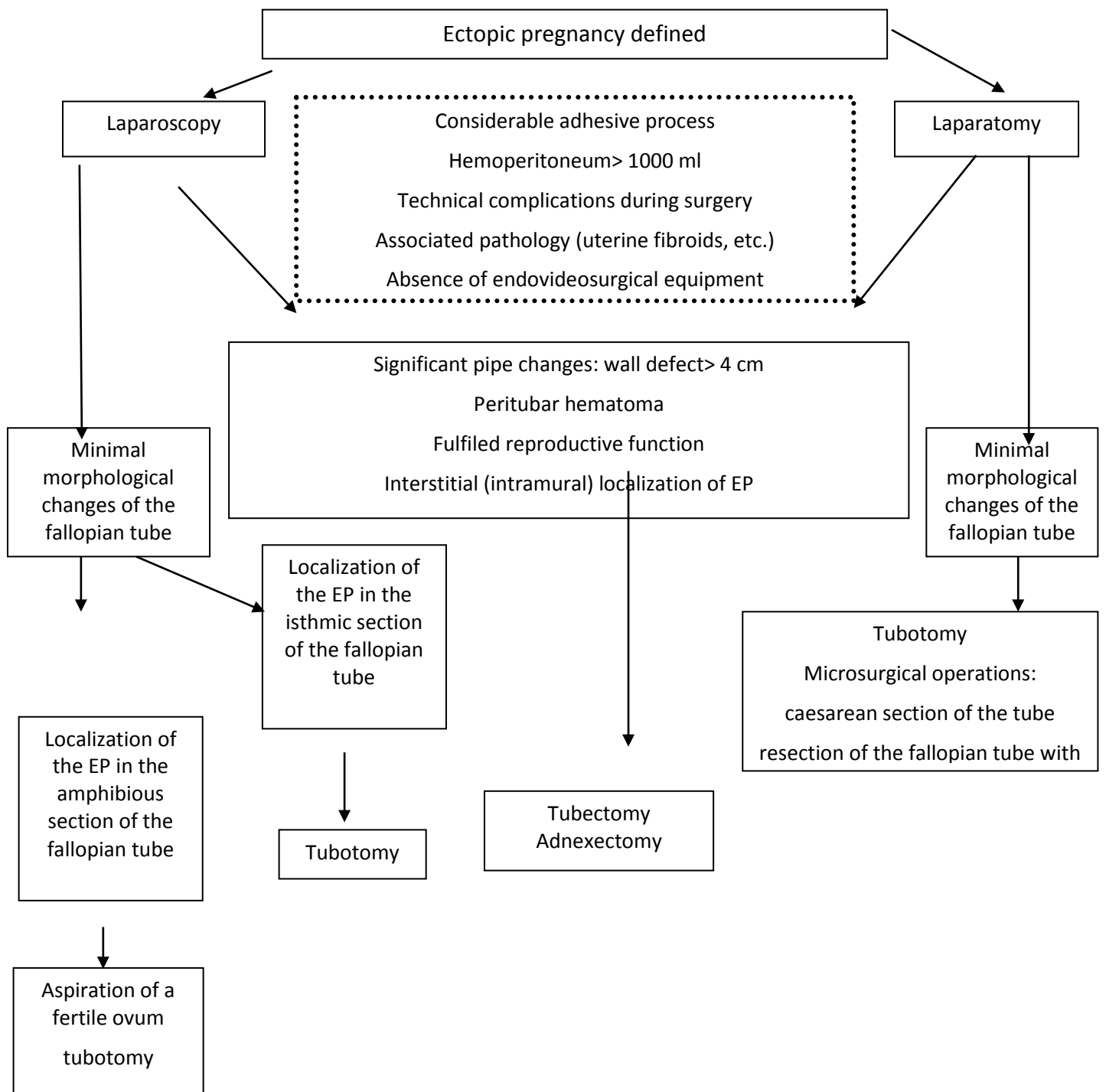
2. In the course of:

- progressive;
- broken (tube abortion, rupture of the fallopian tube);
- the pregnancy has stopped.

# An algorithm for the diagnosis of ectopic pregnancy



# Algorithm for surgical treatment of PV





## Conservative treatment of EP.

Conservative treatment of advanced ectopic pregnancy with methotrexate may only be performed at third-level health facilities, where it is possible to determine the HCG subunit in the serum and to perform ultrasound with a transvaginal sensor.

Indications for the use of methotrexate in the case of PV.

To avoid the introduction of methotrexate during normal uterine pregnancy or miscarriage, it is prescribed only in the following cases:

1. Increased level of HCG subunit in serum after organ-preserving operation on the fallopian tube, which is performed about progressing ectopic pregnancy.
2. Stabilization or increase in the level of the HCG subunit in the serum for 12-24 hours after separate diagnostic scraping or vacuum aspiration, if the size of the fetal egg in the area of the uterine appendages does not exceed 3.5 cm.
3. Determination of ultrasound transducer fetal egg sensor with a diameter of not more than 3.5 cm in the area of uterine appendages in the case of the level of subunit of HCG more than 1500 IU / l in the absence of a fetal egg in the uterine cavity.

### O00.2. Ovarian pregnancy

It develops in the event of fertilization of an egg in the cavity of the follicle. The incidence of ovarian pregnancy is 0.5-1% of all ectopic pregnancies and ranks second in frequency after tubal pregnancy. The only risk factor for this ectopic pregnancy option is the use of intrauterine contraceptives.

#### Diagnosis.

The clinical signs are the same as for tubal pregnancy. With impaired ovarian pregnancy clinic hemorrhagic shock. In 75% of ovarian pregnancies, ovarian apoplexy is mistakenly diagnosed.

Ultrasound examination of the pelvic organs, especially by a transvaginal sensor, helps to diagnose when the fetal egg is imaged in the ovary and a positive qualitative response to HCG.

#### Treatment.

Surgical treatment includes fetal egg removal and wedge-shaped ovarian resection. In case of massive ovarian injury and significant intra-abdominal bleeding, an ovariectomy is performed.

### O00.8 Cervical pregnancy

Cervical pregnancy is one of the rare and severe options for ectopic pregnancy when implantation of a fertilized egg took place in the cervical canal.

#### Diagnosis.

1. Medical history, including gynecological. Attention is paid to the number of abortions and the course of the post-abortion period, inflammatory diseases of the internal genitals, including the cervix.

2. Examination of the cervix in the speculum. Visualization of the cyanotic barrel cervix.
3. Bimanual gynecological examination. The uterus together with the neck in the form of "hourglass".
4. Ultrasound examination of pelvic organs.

Treatment.

1. In the case of diagnosed cervical pregnancy - a definite refusal to scratch the walls of the uterine cavity, which can lead to the development of profuse bleeding.
2. The method of treatment of cervical pregnancy - surgical (extirpation of the uterus).
3. After confirmation of the diagnosis of cervical pregnancy determine the blood group and the Rh-factor, establish a venous catheter, get informed written consent of the patient to perform extirpation of the uterus. In the department of transfusion order single-group fresh frozen plasma, freshly prepared erythrocyte mass, prepare preparations of hydroxyethylated starch.

000 Abdominal (abdominal) pregnancy

It makes 0.003% of all cases of ectopic pregnancy. There are primary and secondary abdominal pregnancies.

The term primary refers to implantation of a fertilized egg in the abdominal cavity.

Secondary - is formed when the fetal egg is in the abdominal cavity after tube abortion. Maternal mortality in abdominal pregnancy is 7-8 times higher than in tubal and 90 times higher than in uterine.

Diagnosis.

Clinical manifestations depend on the duration of pregnancy:

1. In the first and the beginning of the second trimester, they differ little from the symptoms of tubal pregnancy.
2. At a later date, pregnant women complain of pain during the movement of the fetus, a feeling of agitation in the epigastric region, or sudden termination of the movement of the fetus.
3. During physical examination, the soft parts of the fetus and the small uterus are easily palpated. Abdominal pregnancy is also diagnosed in the absence of uterine contractions after oxytocin administration.
4. Ultrasound is used for diagnosis. If the ultrasound is not informative, the diagnosis is confirmed by radiography, CT and MRI. The radiograph of the abdominal cavity, taken in lateral projection, shows the shadow of the skeleton of the fetus, which is superimposed on the shadow of the spine of the mother.

Treatment.

Given the high risk of maternal mortality, surgical treatment is performed immediately after diagnosis. During surgical treatment, the vessels supplying blood

to the placenta are isolated and bandaged and, if possible, removed. If this is not possible due to severe bleeding, the placenta is tamped. Tampons are removed after 24-48 hours.

If these vessels cannot be isolated, the umbilical cord and cord are cut and the placenta is left.

Classification of hemorrhagic shock by clinical course and severity (Chepkiy LP et al., 2003).

The severity of the shock	Stage of shock	The amount of blood loss	
		% Bcc	% body weight
1	Compensated	15 – 20	0,8 – 1,2
2	Subcompensated	21 – 30	1,3 – 1,8
3	Decompensated	31 – 40	1,9 – 2,4
4	Irreversible	> 40	> 2,4

indicator	the degree of shock				
	0	1	2	3	4
<b>Blood loss, (ml)</b>	< 750	750–1000	1000-1500	1500-2500	> 2500
<b>Blood loss, (% BCC)</b>	< 15%	15 – 20%	21 – 30%	31 – 40%	> 40%
<b>Pulse, beats / min</b>	< 100	100 – 110	110 – 120	120 – 140	>140 або < 40
<b>Systolic blood pressure,</b>	N	90 – 100	70 – 90	50 - 70	< 50

<b>mmHg</b>					
<b>Shock index</b>	0,54-0,8	0,8 – 1	1 - 1,5	1,5 – 2	> 2
<b>CVT, mm.w.</b>	60 - 80	40 - 60	30 - 40	0 – 30	≤ 0
<b>White Spot Test</b>	N (2 c)	2 – 3 c	> 3 c	> 3 c	> 3 c
<b>Hematocrit l / l</b>	0,38-0,42	0,30 - 0,38	0,25-0,30	0,20 – 0,25	< 0,20
<b>Respiratory rate per minute</b>	14 – 20	20 – 25	25 – 30	30 – 40	> 40
<b>The rate of diuresis ml / h</b>	50	30 – 50	25 – 30	5 – 15	0 - 5
<b>Mental status</b>	Rest	Minor concern	Anxiety, moderate anxiety	Anxiety, fear or confusion	Confusion or coma

Intensive care of hemorrhagic shock.

General principles of treatment of acute blood loss:

1. Immediate stopping of bleeding by conservative or surgical methods.
2. Ensuring adequate gas exchange.
3. Replenishment of the BCC deficit.
4. Prevention and treatment of coagulopathy.
5. Treatment of organ dysfunction and prevention of multiple organ disadvantages:
  - treatment of heart failure;
  - prevention of renal failure;
  - correction of metabolic acidosis;
  - stabilization of metabolism in cells.
6. Early prevention of infection (by general rules).

Priority actions in case of hemorrhagic shock (performed

in parallel):

1. Evaluate vital functions (heart rate, blood pressure, frequency and breathing, mental status).
2. Report to the responsible obstetrician-gynecologist and the deputy chief medical practitioner on the occurrence of bleeding and development hemorrhagic shock, mobilize staff.
3. Begin inhalation of O<sub>2</sub> via intranasal catheters or nasolithic catheters mask (10-15 l / min).
4. If possible, raise the patient's feet or the foot end of the bed (Trendelenburg position) by 15 - 20 ° to enhance venous return to the heart.
5. Return the patient to the left side to prevent the development of aorto-cavalry syndrome, reduce the risk of aspiration during vomiting and ensure a free airway.
6. Catheterize two peripheral veins with large diameter catheters. Catheterization of the third vein (one of them should be central) to carry out on a background of replenishment of bleeding!
7. Collect 20 ml of blood to determine group and rhesus affiliation, cross-compatibility, hemoglobin and hematocrit content, coagulogram baseline parameters (APHT, prothrombin and thrombin time, EOM, fibrinogen) perform the Lee White test and in parallel start infusion of balanced crystalloid solutions.
8. Catheterize the bladder and debug minimal monitoring of hemodynamic parameters: pulse oximetry, AO, pulse. Document all measurements. Carefully consider the amount of blood loss!

## VI. PLAN AND ORGANIZATIONAL STRUCTURE OF THE EMPLOYMENT:

№ п/п	The main stages of the lesson, them functions and content	Levels of assimilatio	Methods control teaching	Materials methodical software	Time
<b>Preparatory stage</b>					
1.	<b>Organization of classes Setting educational goals and motivation Output level control knowledge, skills, ability: 1) contributing reasons development of</b>	II $\alpha$	Individual oral questioning. Test control Level II. Solution typical tasks	Methodical Development  Questions for individual verbally	15XB.
2.					1год.
3.					15XB.

	<p><b>nosological forms of acute abdominal syndrome;</b></p> <p><b>2) modern classification of diseases that cause the development of "acute abdominal syndrome";</b></p> <p><b>3) the main clinical symptoms of "acute abdomen" in gynecology;</b></p> <p><b>4) modern methods of diagnostics of "acute abdomen" in gynecology;</b></p> <p><b>5) basic principles of treatment of diseases manifesting the acute abdominal syndrome.</b></p>		Level II	<p>poll.</p> <p>Level II test tasks.</p> <p>Typical level II tasks</p> <p>thematic tables, posters, models, slides.</p>	
<b>II. The main stage</b>					
4.	<p>Formation of professional skills and competences:</p> <p>1) work in women's consultations, gynecological department, operating unit;</p> <p>2) master the techniques collecting anamnesis, external and internal gynecological research;</p> <p>3) to supervise a gynecological patient with an acute abdominal syndrome;</p> <p>4) evaluate and interpret survey results the patient;</p> <p>5) to carry out intra-syndrome differential</p>	<p>III<math>\alpha</math></p> <p>III<math>\alpha</math></p>	<p>Practical training</p> <p>Professional training in solution atypical clinical situations</p>	<p>Algorithms for formation practical skills.</p> <p>Gynecological tools for examination gynecological patient.</p> <p>Phantoms.</p> <p>Models.</p> <p>Algorithms for formation professional skills and skills. Patients.</p> <p>Illnesses.</p> <p>Situational atypical tasks</p> <p>Level III</p>	<p>1 год.</p> <p>40хв.</p>

	<p>diagnosis in patients with acute abdominal syndrome and other gynecological pathology;</p> <p>6) make the diagnosis according to received data;</p> <p>7) identify and justify medical tactics;</p> <p>8) to know the course of the main surgical interventions for diseases with the syndrome of "acute abdomen".</p>				
<b>III. The final stage</b>					
5.	Level control and correction professional skills.	III $\alpha$	<p>Individual control practical skills and their results.</p> <p>Analysis and evaluation results clinical work.</p> <p>Level III test control.</p> <p>The solutions are atypical level III tasks.</p>	<p>Gynecological tools.</p> <p>Results clinical examination.</p> <p>Level III test tasks.</p> <p>Atypical level III tasks.</p>	30XB.
6.	Summary of the lesson.				5XB.
7.	Homework.			Indicative map for self work with literature.	15XB.

## VIII. MATERIALS OF METHODOLOGICAL ENSURING:

7.1. Control materials for the preparatory stage of the lesson.

Theoretical basics of mastering the topic:

1. What is the anatomical and histological structure of the external and internal genital organs?
2. List the gynecological diseases that lead to the development of the syndrome of "acute abdomen".
3. Give a definition of ectopic (ectopic) pregnancy.
4. What are the major risk factors for ectopic pregnancy?
5. Modern topographic and clinical classification of ectopic pregnancy.
6. What are the current diagnostic options for ectopic pregnancy?
7. What should be the medical tactics for diagnosing ectopic pregnancy? Indications for surgical and conservative treatment of ectopic pregnancy.
8. Date of determination of ovarian apoplexy and rupture of ovarian cyst.
9. What are the main causes contributing to the occurrence of ovarian apoplexy and rupture of the ovarian cyst?
10. What are the current standards for the diagnosis of ovarian apoplexy and ovarian cyst rupture?
11. Approaches to differential diagnosis of ectopic pregnancy, apoplexy and rupture of the ovarian cyst.
12. What should be the medical tactics in the diagnosis of ovarian apoplexy and rupture of the ovarian cyst?
13. To explain the pathogenesis of myomatous node necrosis.
14. Modern classification of uterine leiomyoma by types of localization.
15. The main clinical symptoms in the development of malnutrition or necrosis of the myomatous node.
16. What are the current possibilities for diagnosis and differential diagnosis of myomatous node necrosis and ovarian cyst perversion?
17. What are the current tactics for the treatment of acute abdominal syndrome with myomatous node necrosis and peritoneal cyst?

Test Control Materials (II $\alpha$ ):

A. Multiple choice test.

Specify risk factors for ectopic pregnancy

1. Age of the patient.
2. Inflammatory diseases of the uterus and uterine appendages in history.
3. Scarring - adhesive changes of the pelvic organs due to previously performed operations on the internal genital organs, pelvioperitonitis, abortion.
4. The presence of submucosal node.



5. Disorders of ovarian hormonal function.
6. Genital infantilism.
7. The presence of concomitant pathology of applications.
8. Endometriosis.
9. Long-term use of intrauterine contraceptives.
10. Extragenital pathology.
11. Auxiliary reproductive technologies.

B. Test for drawing parallels, establishing logical connections between data groups  
Establish a logical connection between the following clinical forms of tubal pregnancy and the corresponding diagnostic features in abdominal vaginal examination

1.	Progressive ectopic pregnancy	1.	The uterus does not meet the period of delay of menstruation, pain at uterine displacement, formation in the projection of the appendage without clear contours, posterior arch smoothed
2.	Tubular miscarriage	2.	The uterus does not meet the period of delay of the menstruation, symptoms of "floating uterus", soreness of the uterus and appendages on the affected side, overhang of the posterior arch
3.	Uterine tube rupture	3.	The uterus does not meet the period of delay of the menstruation, along with the uterus determines the formation of a retorted form, painless, vault free

#### B. Addition test

Specify the main criteria for assessing hemorrhagic shock to assess BCC deficiency, stage and severity

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_

#### D. Test to establish the correct sequence

Establish the correct sequence of the methotrexate application method for ectopic pregnancy, indicating the time of day

1. Determination of the level of HCG subunit in serum \_\_\_\_\_.
2. General analysis of blood, determination of group and rhesus factor of blood of woman, activity of liver enzymes \_\_\_\_\_.

3. When the level of the HCG subunit in serum is increased by more than 15%, the patient is observed, the weekly level of the HCG subunit is determined until this level is less than 10 IU / l.
4. Methotrexate 75-100 ml intramuscularly \_\_\_\_\_.
5. Determination of the level of HCG subunit in serum \_\_\_\_\_.
6. With a decrease in serum HCG subunit less than 15%, methotrexate is re-injected 75-100 ml intramuscularly \_\_\_\_\_.

Typical Level II Tasks:

Problem I.

The patient, 35 years old, went to a women's consultation to complain about the poor blood flow from the genitals, which appeared after a delay of menstruation for 3 weeks. Lower abdominal pain. There were no pregnancies before. Objectively: skin and mucous membranes pale, heart rate - 98 per 1 minute, blood pressure - 100 - 60 mm Hg. Bimanual: the uterus is slightly enlarged in size, painful on palpation, palpable on the right, enlarged and sharply painful appendages, posterior arch extended, sharply painful. What is the previous diagnosis? What research should be done urgently to verify the diagnosis? Determine your doctor's tactics depending on the clinical diagnosis.

Answer.

Task 2.

Patient K., 23 years old, was urgently taken to the gynecological ward with complaints of abdominal pain with irradiation into the rectum, the state of consciousness was assessed as inhibition. The complaints came suddenly after a sexual act. Last menstruation 2 weeks ago. The skin is pale, the heart rate is 102 beats / minute, blood pressure 90/60 mm Hg. The abdomen is tense, somewhat painful in the lower parts, the symptoms of abdominal irritation are slightly positive. What is the most likely diagnosis? What examination plan should be put in place to clarify the diagnosis? What is the doctor's tactics depending on the clinical diagnosis?

Answer:

## 7.2 Materials of methodological support for the main stage of the lesson

№ p / p	Tasks	Sequence of implementation	Remarks, warning about self-control
1.	Survey with external gynecological examination	Follow this sequences: 1) conduct a general examination of the patient; 2) to carry out examination and palpation of mammary glands; 3) to give the patient horizontal position; 4) continue breast palpation; 5) to carry out examination of a stomach; 6) to carry out consecutive palpation of all departments of a stomach, percussion and auscultation.	1. When horizontal the position of the pregnant woman there is a syndrome aorto-forging compression.
2.	Special gynecological examination	Follow this sequences: 1) provide the patient with an appropriate one provisions for internal gynecological study; 2) wear sterile gloves; 3) conduct an examination of the external genitalia; 4) to carry out examination of the vagina and vaginal part of the cervix with the help of gynecological speculum; 5) conduct a bimanual vaginal examination, determining the state of the vagina, cervix, uterus and appendages.	2. Empty bladder and rectum

### 7.3 Materials of control of the final stage of the class.

#### Classification test

Identify the diagnostic features of various forms of tubal pregnancy

<b>Clinical forms of tubal pregnancy</b>	<b>Progressive Ectopic Pregnancy</b>	<b>Tubal Miscarriage</b>	<b>Rupture of the fallopian tube</b>
<b>Clinical signs</b>			
Signs of pregnancy			
The general condition of the patient			
Pain			
Selection			
Vaginal examination			
Additional methods of examination			

### Atypical level III task

#### Task 1.

An ambulance delivered a woman 43 years old with a complaint of aching lower abdominal pain, general weakness and fever to 37.6 C<sup>0</sup>. From the anamnesis: pain has been worrying the patient for the last month, 2 days ago noted an increase in body temperature to subfebrile values and a sign of general weakness, within 6 hours noted an increase in pain in the lower abdomen. Reproductive function: 2 births, 1 medical abortion. The last menstruation - without delay and without features. Gynecological diseases: small-size uterine leiomyoma for 7 years, according to FIGO type 7 medical records. Menstrual function is not impaired, the last menstruation - without delay and without features. Objectively: The skin and mucous membranes are normal, the heart rate is 88 beats / minute, the blood pressure is 130/80 mm Hg. The abdomen is somewhat painful in the lower parts, the symptoms of abdominal irritation are slightly positive in the right iliac region. Bimanual: The uterus is slightly enlarged in size, dense, motile, palpable. Near the uterus to the right is determined by the formation of a dense consistency of up to 7 cm in diameter, palpable sharply painful, limited mobility.

1. Make a preliminary diagnosis. Based on which anamnestic and clinical findings did you make a diagnosis?
2. Determine the most optimal doctor's tactics.

Answer.

#### Task 1.

Patient L., 33, complained of a 10-day menstrual delay and spotting. The pregnancy test is positive. Obstetric and gynecological history is not burdened. Gynecological diseases denies. Menstruation from 13 years, 3-4 days, 28-30 days, regular, moderate, painless. Notes during the last year miserable menstruation for 2-3 days. There are no pregnancies in history. During the initial examination, the condition was satisfactory; skin and visible mucous membranes of normal color, clean, moist. Vesicular breathing, heart sounds clear, rhythmic. The abdomen is soft, painless in all areas. Clinical blood test, biochemical blood test, general urine analysis without features. Ultrasound: uterine body is defined in anteversio-flexio; contours clear, uneven, dimensions 58x46x54 mm; on the back wall a subserous myomatous node with a diameter of 12 mm is visualized. Endometrium 12 mm thick, homogeneous, structure corresponds to the 2nd phase of the cycle. Normal cervix. The cervical canal is locally enlarged. In the cervical canal, a cystic cavity of 8 mm in diameter was detected. Inside the cavity is determined by cystic involvement with a diameter of 2 mm (Fig. 1, 2). Right ovary not enlarged (22x14x11 mm), follicular apparatus of normal structure. The left ovary is not enlarged (35x18x18 mm), the follicular

apparatus has a normal structure. The yellow body is defined with an average diameter of 18 mm. A small amount of free fluid in ectopic space.

1. Make a preliminary diagnosis. Based on which anamnestic, clinical, and ultrasound findings have you been diagnosed with?

2. Determine the most optimal doctor's tactics.

Answer.

**7.4 Materials for methodological support of students 'self-preparation  
(indicative map for organizing students' independent work with educational  
literature)**

№ p / p	Training tasks	Instructions to the task
1.	Explore: Gynecological conditions leading to the development of acute abdominal syndrome	Carefully understand the definitions and classifications of all gynecological diseases that lead to the development of acute abdominal syndrome
2.	Modern methods of diagnostics of various diseases leading to the development of acute abdominal syndrome in gynecology	To name the standard methods of diagnostics of diseases leading to the development of the syndrome of "acute abdomen" in gynecology
3.	Current approaches to surgical and conservative treatment of ectopic pregnancy	To pay attention to indications and algorithm of conservative treatment of ectopic pregnancy
4.	Types of surgery used in the treatment of patients with acute abdominal syndrome	To pay attention to indications for surgical interventions and course of operations at various gynecological diseases with a syndrome of "acute abdomen"
5.	Current requirements in accordance with national protocols for the management and treatment of patients with acute abdominal syndrome	Pay attention to the relevant clinical protocols used in the countries of the European Union

## VIII. LITERATURE

### a) Educational.

#### Basic:

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1. Zaporozhan VM Operative gynecology. / VN Zaporozhye. - Odessa: ODMU, 2006. - 448 p.
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6. Outpatient care in gynecology / ed. V.A. Beniuk // Gynecologist doctor's guide. - 2nd ed., Suppl. - K. : Publishing House "Health of Ukraine", 2010. - 462 p. - (The series "Library" Health of Ukraine ).
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9. Electronic document “Adapted clinical guidelines based on evidence of“ Abnormal uterine bleeding ”, 2016.

10. National consensus on the management of patients with abnormal uterine bleeding of the Association of Gynecologists and Endocrinologists of Ukraine. Reproductive endocrinology. 2015; 1 (21): 8-12.

11. Pavlyuchenko MI, Slinko OM Postpartum purulent-septic complications. Tutorial. (Approved at the meeting of the Central Methodical Council of ZSMU, Minutes No. 5 of May 15, 2014) - Zaporizhzhya.-2014.-105 p.

12. Zaliznyak V.O. Emergency conditions in gynecology. - Zaporozhye: ZDMU. - 213. - 84 p.

b) Methodical.

1. Kazakov VM, Vitenko IS, Talaenko OM, Kamenetsky MS, Pervak MB, Kotlubey OV Development of methodological guidelines for students of higher medical educational establishments in accordance with modern state standards and principles of the Bologna process (Methodical recommendations for teachers of higher medical educational establishments of IY accreditation level): Kyiv-Donetsk: CMKMOZ of Ukraine, 2005.-158 p.

2. Miller VE Methodical bases of preparation and carrying out of educational employment in medical universities (manual): - Kyiv, Khreschatyk, 2006. - 80 p.

# INFERTILE MARRIAGE

## I. SCIENTIFIC AND METHODOLOGICAL RATIONALE OF THE THEME (UPDATE):

The demographic situation in Ukraine today is extremely difficult. The evidence of this is an increase in mortality rates and a decrease in fertility rates. All this is related to the negative economic situation and the harmful effects of environmental factors on the reproductive system, which leads to infertility.

Infertility remains one of the most important medical and social problems. A barren couple is one who, at desire to have a baby, does not have conception for 12 months when active sexual intercourse without the use of contraceptives. Pregnancy is believed to occur on the basis of regular (2-3 times a week) sexual intercourse for 1 year in married couples who do not use contraceptives.

According to the State Statistics, the infertility rate in Ukraine is 17-19.5% of the total population of married couples. Among the countries of the world, Ukraine ranks 211th out of 222 in terms of fertility.

A distinction is made between primary, secondary male and female, combined (combination of female and male infertility or spousal incompatibility) and idiopathic (causes not determined) infertility. If none of the partners had children before marriage, it is a matter of primary infertility. If a woman has had at least one pregnancy, regardless of its completion, diagnosed infertility is considered "secondary". They also define congenital or acquired infertility.

The most common cause of female infertility is endocrine diseases that are associated with impaired oogenesis and the ovulation process. Infertility suffers from patients with various forms of hyperprolactinemia, hyperandrogenism, polycystic ovary syndrome, post-pubertal form of adrenogenital syndrome and other forms of endocrine disorders. A significant number of infertility cases are the result of a disorder of the endocrine function of the ovaries, and these disorders can be both primary and secondary as a result of the transmitted inflammation. In the ovaries, cyclical processes are disturbed, anovulation or slowing of maturation of the follicle with a defective luteal phase occurs. Endocrine infertility also occurs with disorders of the function of the hypothalamic-pituitary system. In infertility endocrine genesis is often a violation of the menstrual cycle in the form of amenorrhea, hypomenstrual syndrome, uterine bleeding.

Tubal and peritoneal factors are currently the cause of infertility in 25-35% of women. This leads to adhesive process in the pelvis, which causes the pipes to bend

while maintaining their patency. Tubal infertility is caused by anatomical and functional disorders in the fallopian tubes. Abortions are of great importance in the etiology of infertility because they cause inflammatory processes in the uterine mucosa with subsequent dystrophic changes that impede implantation. Salpingo-oophorectomy can lead to ovulation, and if it occurs, the adhesive process does not allow the egg to enter the tube.

Infertility can be caused by a condition of a uterine mucosa when the endometrium undergoes degenerative changes due to post-inflammatory processes, repeated scraping of the walls of the uterine cavity, which impairs the implantation process and leads to uterine form of amenorrhea. The immunological form of infertility, which is caused by the formation of anti-sperm antibodies in a man or woman, occurs relatively rarely. Its frequency is 2% among all forms of infertility.

The cause of infertile marriage in 40 - 50% is the pathology of the reproductive system in one of the spouses, in 25 - 30% - in both, 15-20% of cases account for infertility of unclear origin. In 50-82% of cases, women have combined infertility. With combined infertility, the first place among female factors is tubal-peritoneal - 43%, in the second - endocrine infertility - up to 30%, in the third - endometriosis - 25%. An analysis of the causes of infertility revealed an increase in the proportion of the male factor over the past 20 years by an average of 10 - 12%.

Treatment with the use of assisted reproductive technologies (ARTs) is becoming more widespread. ART is a collection of infertility treatments that include various types of gamete manipulation, some or all stages of reproductive cell preparation, fertilization and embryo development before transfer to the uterus, which is performed in vitro. Today, these are not only ways of overcoming various forms of male and female infertility, but also the possibility of preventing and treating hereditary diseases through preimplantation molecular diagnostics and cell technologies that have been developing rapidly in recent decades.

However, not always are the ART attempts successful. Their efficiency in Ukraine is on average 33.53% per cycle, in France - 27.5%, in Belgium - 26.7%, in the UK - 30.3%.

The average efficacy of using ART in women with normal ovarian reserve is 30%, with a low ovarian reserve and insufficient ovarian response the frequency of successful extracorporeal fertilization (IVF) attempts lower and does not exceed 12%. The incidence of unsuccessful ART attempts, which is caused by a low ovarian reserve and insufficient ovarian response, ranges from 11 to 24%, and in the case of

repeated attempts more than 45%. When the embryo transfer stage is reached, the pregnancy rate ranges from 3 to 6%, only sometimes reaching 12%.

Not only is infertility a topical problem in modern medicine, but it is also of great social importance because it is linked to a person's mental state.

Although modern MDT methods do not allow a global solution to the demographic situation in the country, their widespread implementation and continuous improvement treats infertility for many married couples who until recently were simply doomed to childlessness and enables them to have children of their own.

In order to improve the results of infertility treatment, the priority ways for the development of ART are the improvement of laboratory methods, optimization of clinical protocols, mandatory definition of prognostic criteria (female reproductive potential, quality of oocytes and embryos, endometrial receptivity, ability of embryos, and ability of embryos). molecular diagnostics and cell technology and family preservation.

## II. LEARNING OBJECTIVES

### 2.1 The student should know ( $\alpha$ -II):

- concept of infertility in marriage, criteria for making a diagnosis of infertility;
- demographic and medical aspects of infertility, its classification;
- regulatory documents governing the provision of medical care to infertile couples in Ukraine, features of organizing specialized medical care for infertile couples
- basics of folliculogenesis, oocyte maturation and ovulation, basic methods for ovulation confirmation;
- basic methods for determining the emergency reserve;
- modern approaches to the diagnosis of infertility in marriage; algorithm for examination of infertile married couple.
- basic endocrinological syndromes, basics of hormonal screening for the diagnosis of endocrine infertility;
- Features of examination of patients with oligomenorrhea and amenorrhea;
- indications and contraindications to ovulation induction;

- risk factors, classification of clinical manifestations of CSF, features of diagnosis, clinic, diagnosis and management of patients with ovarian hyperstimulation syndrome;
- mechanisms of NLF formation, effect of progesterone deficiency on endometrium in NLF;
- NLF diagnostic methods, NLF correction principles, drugs, administration regimens;
- definition and classification of PCOS, current understanding of the etiopathogenetic mechanisms of PCOS development, clinical and biochemical features of PCOS;
- principles of conservative and surgical treatment of PCOS;
- the main causes of tubal-peritoneal infertility;
- basic methods of diagnostics and treatment of tubal-peritoneal infertility, examination standards, features of post-operative period management and rehabilitation of patients;
- the main etiological factors of the development of male infertility, methods of diagnosis, interpretation of sperm;
- methods of collecting sperm (TESE, TESA, MESA, PESA), indications for the use of DHT;
- the role of DRT in the treatment of infertility, legal and ethical principles in the use of DRT;
- indications for the use of DRT. Types of DRT;
- testimony, principles of intrauterine insemination, semen quality requirements;
- the concept of IVF, indications and contraindications to the conduct, types of programs. Conditions for conducting a standard IVF program (female and male factors);
- indications for intracytoplasmic injection of sperm;
- indications for the cryopreservation of embryos, the timing of sampling, the storage time of embryos;
- indications for the use of the DRT program by donor oocytes;
- major complications of DHT.

## 2.2 The student must be able to ( $\alpha$ -III)

To master the skills:

- identifying risk factors for female and male infertility;
- collecting general and special medical history for women with infertility;
- evaluate the emergency reserve;
- interpret the results of hormonal, ultrasound, basal thermometry data in infertile patients;
- management of patients with NLF;
- to develop patients with various forms of hyperproliferative syndrome (endometriosis, uterine fibroids) and with infertility an algorithm of diagnostic and therapeutic measures;
- to interpret the clinical and biochemical results of the PCOS examination.
- carry out differential diagnosis of PCOS and endocrinopathy;
- diagnose ovarian hyperstimulation syndrome;
- to prepare patients for hysterosalpingography, hysteroscopy and laparoscopy, to interpret the obtained data;
- develop an algorithm for screening men in infertile couples;
- to interpret spermogram data, MAR-test;
- determine the contingent of patients to be IVF;
- determine the indications for intrauterine insemination, the program of intracytoplasmic injection of sperm, cryopreservation of embryos, the use of donor oocytes.

## III. PURPOSE OF PERSONAL DEVELOPMENT

(EDUCATIONAL PURPOSE)

To educate students about the importance of infertility. Pay particular attention to current diagnostic capabilities, formulate concepts about the timing of the infertile couple examination and timely adjustments to specialized centers for the reproductive function of the family to select appropriate methods of reproduction and reproductive function. To interest students in a detailed study of the material on the problem of diagnostics of the causes of infertility from the point of view of modern reproductive technologies. Enhance understanding of deontology and medical ethics with couples in counseling on infertile marriage. To develop in students a sense of professional responsibility for their own actions, the fate of women before prescribing treatment and diagnostic measures on issues of diagnostics and restoration of fertility. Master the ability to make psychological contact with women of different age groups.

To strengthen students' awareness of the role of achievements of national reproductology and world experience of fertility treatment.

#### IV. INTERDISCIPLINARY INTEGRATION

Discipline / Topics	Know	Be able
<b>I. Previous disciplines (providing):</b>		
History of medicine	Contribution of domestic and foreign scientists to: - study of anatomy and physiology of female genital organs; - studying the problem of infertility prevalence in Ukraine and the world.	- to explain to the medical community the contribution of scientists, especially domestic ones, to the study of various aspects of the problem of barren marriage. - be able to give examples of outstanding national and world scientists and their outstanding scientific achievements in solving this problem.
Normal anatomy Human	- anatomy of female genital organs.	interpret information about the anatomical structure of the female genital organs.
Histology and embryology	- morphofunctional features of the female body at different periods of development of the fertile egg.	to interpret information about the peculiarities of the morphofunctional state of the female body in different periods of pregnancy.

Pathological anatomy of the person	- pathological changes in the body of a woman and a man, which lead to the pathology of the organs of the reproductive system and which can occur under the influence of medical preparations.	- to interpret information about pathological changes in organs of reproductive systems of female and male organism in infertility - be able to provide information and macro- / microscopically characterize changes occurring in the genital organs under the negative influence of various medical preparations.
Pathological physiology with a course in clinical immunology	- pathological changes that occur in a woman's body and disorders in the genitals, due to the use of different types of medicines. - aspects of formation and functioning of a woman's immune system in normal and infertile conditions.	- to interpret information on the occurrence of disharmonious diseases and pathological changes in the genital organs, which had a negative impact of medical preparations. - be able to provide information on the impact of immunological mechanisms in the formation of hormonal <del>diseases and infertility</del>
Microbiology	- features of infectious agents that cause STIs and their sensitivity to antibacterial drugs.	be able to interpret the role of infection in the occurrence of tubal-peritoneal form of female infertility and disorders of male reproductive function.
<b>II. The following disciplines (which ensure the acquisition of knowledge):</b>		
Neonatology	Rehabilitation measures for newborns whose mothers were exposed to medications during pregnancy.	Be able to develop a set of rehabilitation measures to improve the health of newborns who have suffered a negative effect of medicines during intrauterine stay.

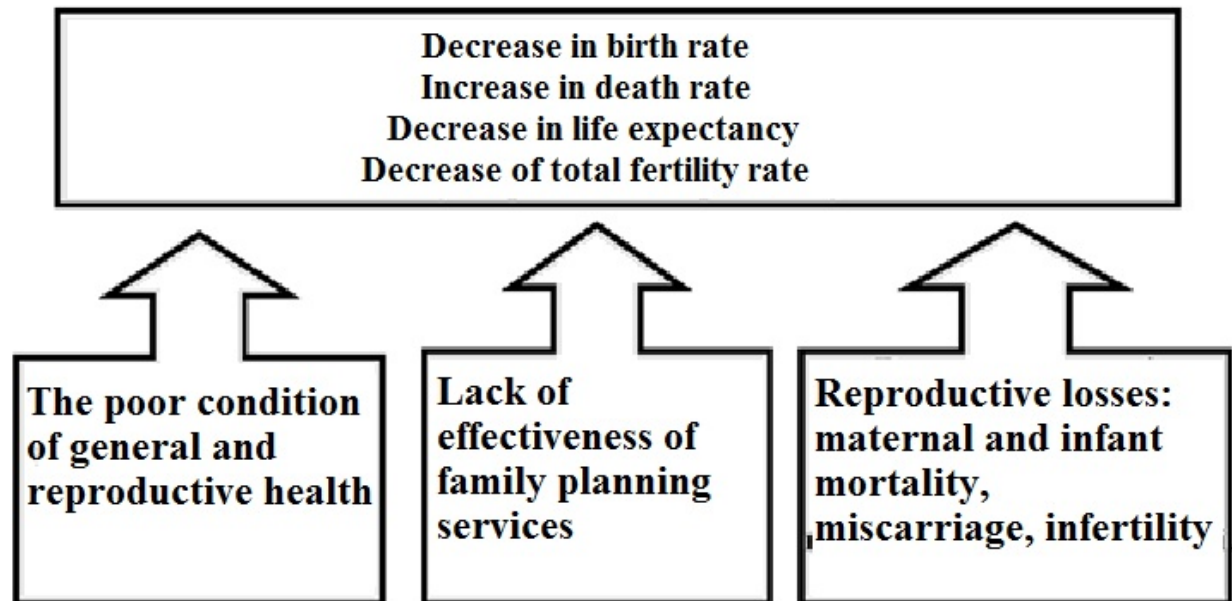


Neurology and psychiatry	Possible early and late neurological symptoms, development of psychosomatic conditions in women with infertility and persons who have used assisted reproductive technologies.	Be able to recognize the neurological symptoms and disorders of psychological status that have arisen as a result of infertility and the use of DHT, and to develop a complex of medical and diagnostic measures for these pathological conditions.
<b>III. Intra-curricular integration:</b>		
Differential diagnosis of various disorders of the function of the female reproductive system	- classification of infertility forms - classification of amenorrhea	- by means of the given classification to specify criteria of differential diagnostics of various disturbances of function of a female reproductive system
Principles of examination of women with infertility	- algorithm for examination of women with infertility	- to demonstrate the methodology of external and internal gynecological examination
Ultrasound in the diagnosis of infertility	- the main criteria of ultrasound diagnostics	-Demonstrate the possibilities of ultrasound examination in the office of functional diagnostics
Hysteroscopy as a method of diagnosis and treatment of various disorders of the female reproductive system	-main indications for hysteroscopic intervention	- to demonstrate the main steps in the hysteroscopic examination
Hysterosalpingography	-main indications for hysterosalpingography	- to demonstrate the main steps in the hysterosalpingographic study

Laparoscopy	-main indications for laparoscopic intervention	- Demonstrate the main steps in laparoscopy
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V. CONTENTS OF THE TOPIC:  
STRUCTURAL-LOGICAL SCHEME OF LESSON

# Demographic crisis



**Infertile marriage**

<p><b>Male infertility</b></p> <ol style="list-style-type: none"> <li>1. Excretory infertility: <ul style="list-style-type: none"> <li>• excretory toxic</li> <li>• excretory obstruction</li> </ul> </li> <li>2. Secretory infertility: <ul style="list-style-type: none"> <li>• secretory-endocrine</li> <li>• secretory-toxic</li> <li>• discretionary</li> </ul> </li> <li>3. Immunological</li> <li>4. Psychogenic-sexual</li> <li>5. Idiopathic.</li> </ol>	<p><b>Female infertility</b></p> <ol style="list-style-type: none"> <li>1. Female infertility associated with lack of ovulation</li> <li>2. Female tubal infertility: <ul style="list-style-type: none"> <li>• associated with congenital abnormalities of the fallopian tubes</li> <li>• tubular: obstruction, blockage, stenosis</li> </ul> </li> <li>3. Female infertility of uterine origin: <ul style="list-style-type: none"> <li>• congenital anomaly of the uterus</li> <li>• defect of implantation of an egg</li> </ul> </li> <li>4. Female infertility of cervical origin</li> <li>5. Female infertility related to male factors</li> </ol>
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	6. Female infertility of another nature (psychogenic-sexual) 7. Female infertility is unclear
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**VI. PLAN AND ORGANIZATIONAL STRUCTURE OF THE LESSON:**

№ p / p	The main stages of the lesson, their functions and content	Levels of learning	Methods of control and training	Methodological support materials	Time
<b>I. Preparatory stage</b>					
1. 2. 3.	<p>Organization of classes</p> <p>Goal setting and motivation</p> <p>Control of the initial level of knowledge, skills, abilities:</p> <p>1. Relevance of the problem of infertility.</p> <p>2. Anatomy and physiology of female genital organs</p> <p>3. Organization of a system of medical care for patients with infertility in Ukraine.</p> <p>4. Classification of infertility, the main etiological factors of pathology.</p> <p>5. The main neuroendocrine syndromes that can cause infertility.</p> <p>6. Methods of examination of patients with infertility.</p> <p>7. Stimulation of ovarian function. Ovarian hyperstimulation syndrome.</p> <p>7. Types of methods of assisted reproductive technologies, indications, contraindications, benefits.</p> <p>8. The main complications of</p>	II α	<p>Individual oral survey.</p> <p>Test control</p> <p>Level II.</p> <p>Solution of typical level II problems.</p>	<p>Magazine</p> <p>Methodical developments</p> <p>Questions for individual oral questioning.</p> <p>Level II test tasks.</p> <p>Typical level II tasks. Themed tables, posters, models; a selection of up-to-date literature on the issues under study; collection of results of instrumental methods of examination, results of laboratory examination.</p>	
<b>II. The main stage</b>					



## VII. MATERIALS OF METHODOLOGICAL ENSURING

### 7.1. Control materials for the preparatory stage of the lesson.

Theoretical basics of mastering the topic:

1. Give the definition of the term "barren marriage".
2. Identify the main factors for the development of infertility.
3. Define general provisions for counseling infertile couples.
4. Classification of infertility.
5. Determine the timing of the examination of infertile couples.
6. Identify the basic and additional methods of examination of infertile couples.
7. Define the term "assisted reproductive technologies".
8. Determine the amount of examination of the married couple before carrying out extracorporeal fertilization.
9. Features of pharmacodynamics of hormonal drugs used for induction of ovulation.
10. To determine the risk factors for the development of ovarian hyperstimulation syndrome, the principles of management of such patients.
11. Name the major complications of assisted reproductive technologies.

### Test Control Materials (II $\alpha$ )

#### A. Multiple Choice Test:

Assistive reproductive technologies include:

1. Extracorporeal fertilization
2. Hatching
3. semen donation
4. oocyte donation

5. donation of embryos
6. Surrogate motherhood
7. artificial insemination

B. Substitution test:

1. List four contraindications for extracorporeal fertilization (IVF):

- 1)
- 2)
- 3)
- 4)

2. List four groups of drugs that are used to induce superovulation:

- 1)
- 2)
- 3)
- 4)

B. Test to establish the correct sequence

1. Set the correct sequence of extracorporeal fertilization steps?

- 1) Selection and examination of patients.
- 2) Follicular puncture.
- 3) Induction of superovulation.
- 4) Lutein phase support.
- 5) Oocyte insemination.
- 6) Cultivation of embryos.
- 7.) Transfer of embryos into the uterine cavity.
- 8.) Diagnosis of pregnancy.

Typical Level II Tasks:

Task 1.

Support for the luteal phase of the stimulated menstrual cycle begins

Answers to choose from:

and. 24 hours after follicular puncture.

b. 48 hours after follicular puncture.

in. 72 hours after follicular puncture.

at the same time as the follicular puncture procedure.

Task 2.

Contraindications for IVF:

Answers to choose from:

a. submucosal uterine fibroids.

b. tube occlusion.

in. the presence of retentive ovarian cysts.

Problem 3.

The mandatory scope of a woman's examination for an IVF is:

Answers to choose from:

a. Basal temperature measurement.

b. Endometrial biopsy.

in. Antiphospholipid antibody screening.

## 7.2 Materials of methodological support for the main stage of the lesson

№ p / p	Tasks	Sequence of implementation	Remarks, warning about self-control
1.	Patient survey (history)	<p>Follow these steps:</p> <ol style="list-style-type: none"> <li>1) Main complaints</li> <li>2) Additional complaints</li> <li>3) Delayed somatic diseases and surgical interventions</li> <li>4) Menstrual, sexual and reproductive function, nature of contraception</li> <li>5) Gynecological diseases, sexually transmitted infections and genital surgery</li> <li>6) Family history</li> <li>7) History of the disease, duration of infertility, preliminary examination and treatment</li> </ol>	The patient should be in a comfortable position (sitting)
2.	Overview	<p>Follow these steps:</p> <ol style="list-style-type: none"> <li>1) Variation of the physique of a woman</li> <li>2) The nature of the hair and the condition of the skin</li> <li>3) Breast examination</li> <li>4) Belly examination</li> <li>5) Palpation of the abdomen</li> <li>6) Percussion and auscultation of the abdomen</li> </ol>	At horizontal position of the patient is possible the occurrence of the syndrome aorto-forging compression.
3.	Gynecological Review	<p>Follow these steps:</p> <ol style="list-style-type: none"> <li>1) Give the patient a horizontal position</li> <li>2) Review of external genitalia</li> <li>3) Research using gynecological speculum</li> </ol>	Emptied bladder and rectum.



№ p / p	Tasks	Sequence of implementation	Remarks, warning about self-control
		Bimanual vaginal examination (abdominal-vaginal, abdominal-rectal)	

### 7.3 Materials of control of the final stage of the class

Atypical Level III Task:

Task 1.

Determine the most informative method for assessing uterine patency. Give the rationale for your choice. Define a plan for preparation for manipulation:

- Hysterosalpingography.
- Pertubation.
- Ultrasound examination.
- Hysteroscopy.

Answer:

Task 2.

Which of the following hormones is appropriate to determine on the 5-7th day of your menstrual cycle:

- Prolactin.
- Testosterone.
- Dehydroepiandrosterone sulfate.
- Progesterone.
- Follicle-stimulating hormone.

Answer:

Problem 3.

Choose the most appropriate method of extracorporeal fertilization if the male:

- Oligozoospermia.

- available anti-sperm antibodies in the ejaculate.
- There has been poor fertilization in previous IVF attempts.

Give the rationale for your choice. Outline the basic principles of the method.

Answer:

Problem 4.

What are the conditions of ovulation stimulation?

Give the rationale for your choice. Define ovulation induction protocol and follow-up plan for patient monitoring.

Answer:

Task 5.

The main requirements for donor sperm are:

- volume of ejaculate more than 1 ml.
- the concentration of sperm in 1 ml of ejaculate is more than 20 million.
- the proportion of progressively mobile forms is more than 60%.
- the proportion of morphologically normal forms more than 60%.

Give the rationale for your choice. Identify basic requirements for sperm donors.

Answer:

Problem 6.

Choose indications for surgical receipt of sperm:

- Obstructive azoospermia.
- Teratozoospermia.
- Testicular insufficiency.

Give the rationale for your choice. Identify contraindications for the surgical receipt of sperm.

Answer:

Task 7.

Select basic requirements for professional oocyte donors:

- Age from 20 to 34 years.
- Having your own healthy baby.
- Presence of striking phenotypic features.

Give the rationale for your choice. What is the indication for IVF using donor oocytes.

Answer:

Problem 8.

What are the indications for IVF using donor embryos:

- Absence of oocytes.
- Adverse medical-genetic prognosis.
- Excretory infertility.
- Age 35 years.

Give the rationale for your choice. Determine the embryo donor examination plan.

Answer:

Task 9.

Select possible complications of artificial insemination:

- Shock reaction.
- Ectopic pregnancy.
- Acute inflammation of the female genital area.
- Ovarian hyperstimulation syndrome.

Give the rationale for your choice. Identify contraindications for artificial insemination.

Answer:

Problem 10.

Identify the indications for artificial insemination:

- Male infertility.
- Ejaculatory-sexual disorders.
- Absence of a sexual partner.
- Uterine occlusion.

Give the rationale for your choice. Determine the examination plan prior to the artificial insemination.

Answer:

**7.4 Materials of methodological support of students 'self-preparation (indicative map for organizing students' independent work with educational literature)**

<b>№ p / p</b>	<b>Training tasks</b>	<b>Instructions to the task</b>
1.	To analyze the demographic situation in Ukraine.	Identify current approaches to overcoming the demographic crisis in Ukraine.
2.	Determine the status of infertile marriage.	Analyze and summarize the status of infertility prevalence.
3.	To draw conclusions from the analysis of modern literature on the effectiveness of different methods of extracorporeal fertilization.	On the basis of the analysis of modern literature to make conclusions about the effectiveness of in vitro fertilization.
4.	To investigate the literature on the features of pregnancy and pregnancy in infertile patients.	Summarize the literature on the course and management of pregnancy in infertile patients.
5.	The role of evidence-based medicine in overcoming infertility.	Give an example of evidence-based medicine in overcoming infertility.
6.	Deontological and psychological aspects of the doctor in the management of patients with infertility.	To know the deontological and psychological aspects of the doctor in the management of patients with infertility.

## VIII. RECOMMENDED BOOKS

### Basic:

1. Obstetrics & gynecology : textbook / V. I. Gryshchenko [et al.] ; ed. by.: V. I. Gryshchenko, M. O. Shcherbina. - Kyiv : AUS Medicine Publ. - Vol. 2 : Gynecology. - 2nd ed. - 2018. - 352 p.
2. Obstetrics and Gynecology: in 4 volumes: national textbook / no. ed .; in a row. Academician of the National Academy of Medical Sciences of Ukraine, prof. V.M. It is blocked. - Volume 3: Non-surgical gynecology / qty. ed .; in a row. Acad. NAMS of Ukraine, prof. V.M. It is blocked. - K .: VSV "Medicine", 2014. - 928 p.
3. Obstetrics and Gynecology. Tatarchuk TF, et al. Kiev: Medicine. - 2013.
3. Infertile marriage // Gynecology: a national guide / Ed. YOU. Kulakova, IB Manukhina, G.M. Savelyeva. - M .: GEOTAR-Media, 2011. - P. 581 - 628.
2. Gynecology: a textbook / ed. B.M. Wentkivsky, G.K. Stepankivska, M.E. Yarotsky. - K .: VSV Medicine, 2012. - 352 p.
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1. Krasnopol'skaya KV Clinical aspects of the treatment of infertility in marriage / K.V. Krasnopol'skaya, T.A. Nazarenko // M .: GEOTAR-Media, 2014. - 376 p.
2. Nazarenko TA Auxiliary reproductive technologies // Infertile marriage. Modern approaches to diagnostics and treatment: a guide / Ed. G.T. Dry, TA Nazarenko. - 2nd ed. and ext. - M .: GEOTAR\_Media, 2010. - P. 505 - 516.
3. Nazarenko TA, Mishieva NG Infertility and age: ways to solve the problem. - M .: MEDPress-inform, 2010. - 208 p.
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### Additionally:

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2. Bozhedomov VA Etiology of autoimmune male infertility / VA Bozhedomov, MA Nikolaeva, IV Ushakova // *Obstetrics and Gynecology*. - 2013. - №2. - P. 68 - 77.
- Boychuk OG Predicting inefficiency of assisted reproductive technologies in women with infertility and liver pathology / Boychuk OG // *Woman's health*. - 2016. - №4 (110). - pp. 171 - 174.
3. Vasilyeva KV Influence of urogenital chlamydia infection in pregnant women on reproductive health / K.V. Vasilyeva. M.O. Dudchenko, IB Popova // *Woman's health*. - 2015. - No. 10 (106). - P. 166 - 168.
4. Yu.Vdovichenko Therapy of sexually transmitted infections in accordance with international standards / Yu.P. Widowichenko, E.N. Gopchuk // *Woman's health*. - №1 (77) - 2013. - P.105 - 109.
5. Yu.Vdovichenko Peculiarities of infertility and ovarian reserve status in women with autoimmune thyroid pathology / Yu.P. Widowichenko, D.Yu. Beraya // *Woman's health*. - No. 1 (77). - 2013. - P. 185 - 190.
6. Veropotvelyan PN A Practical Approach to the Management of Patients with Ovarian Hyperstimulation Syndrome / P.N. Veropotvelyan, IS Tsehmistrenko, NP Veropotvelyan // *Medical aspects of women's health*. - 2016. - №8 (105). - P. 42 - 52.
7. Vityuk A.D. A differentiated approach to the diagnosis of ovarian status in women with infertility in ovarian depletion syndrome / AD. Vityuk, R.G. Gafiychuk // *Woman's health*. - 2013. - №4 (80). - pp. 141 - 147.
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11. Galaktionova AM Optimization of the treatment of anovulatory infertility using metformin adjuvant therapy: Dis... Cand. - M., 2012. - 125 p.
12. SI Gamidov Tactics of conducting infertile men with varicocele: a comparative analysis of different treatment methods / SI. Gamidov, R.I. Ovchinnikov, A.Yu. Popova // *Obstetrics and Gynecology*. - 2013. - №2. - P. 77 - 84.

13. Gasparyan S.A. Endometriosis and fertility. The key points of treatment / S.A. Gasparyan, R.M. Ionova. OS Popova // Obstetrics, gynecology, reproduction. - 2015. - №4. - P. 66 - 72.
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17. Dubnitskaya LV Tubal-peritoneal infertility / L.V. Dubnitskaya, A.A. Alekseenko // Infertile marriage. Modern approaches to diagnostics and treatment: a guide / Ed. G.T. Dry, TA Nazarenko. 2nd Upt. and ext. - M.: GEOTAR-Media, 2010. - P. 96 - 113.
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## **FAMILY PLANNING**

### **I. SCIENTIFIC AND METHODOLOGICAL RATIONALE OF THE THEME (UPDATE):**

According to world statistics, 185 million pregnancies occur annually in the world, of which 75 million are unwanted and 45 million result in artificial abortion (according to UNESCO). World experience shows that the use of modern contraceptive methods as a means of preventing unwanted pregnancy leads to a decrease in the frequency of artificial and illegal abortions, which allows to reduce maternal mortality by 25-50%.

Family planning (PS) is a set of medical and social measures aimed at reducing the incidence, maintaining the health of women and adolescent children, preventing unwanted pregnancy, ensuring optimal intervals between childbirth, the number of children in the family, preventing premature births, late, frequent births, prevention of sexually transmitted infections (STIs), AIDS.

Contraception is one of the components of the PS system - prevention of unplanned pregnancy. In 1990, a Global Forum on Environmental Development Issues for Survival was held, which noted that early, frequent, and late births should be considered as three major factors that significantly increase maternal and infant mortality. It was also decided to include PS in the number of environmental factors that ensure family health.

Research on fertility regulation has revealed the relationship between a woman's reproductive behavior and her state of health. Previously, the choice of woman was limited to the right to abortion, but today it includes the right to contraception, the right to pregnancy and the right to voluntary surgical sterilization. Analysis of the etiology of contraception and abortion showed that at present in Ukraine the attitude to modern methods of contraception, especially hormonal, remains wary. The end of XX century. distinguished by the development and widespread use of modern contraceptive technologies (hormonal contraception, intra-uterine agents, surgical sterilization, etc.). These agents are reliable and safe for most women, provided they are properly used, and there are no pathological conditions in the body. At the same time, their use implies the need for medical control and individual selection.

When selecting a contraceptive, the medical professional and the patient assume that the method should be effective and easy to use, and the potential risk of complications should be minimized. The birth control effect should be temporary so that the reproductive function can be restored at the user's request. In this case, the physiology of sexual intercourse should not be disturbed and negative emotions

should arise. The method can also have a non-contraceptive effect on the health of the user (normalization of hormonal disorders, STI prevention, etc.). And another important condition - the method should be affordable (reasonable price, available for sale).

In Ukraine, the consequences and complications of unwanted and unplanned pregnancy, especially in women at risk of unplanned pregnancy, are unfavorable. An important role in improving reproductive health belongs to the family planning service, whose main activity is to preserve and improve health by preventing unwanted pregnancies, as well as reducing pregnancy among high-risk women, reducing morbidity and mortality.

Every year, the number of women who use intrauterine and oral contraceptives increases. But there are still many couples using methods such as natural barriers. These methods are not reliable. Therefore, the possibility of having an unwanted pregnancy in women is still very high.

The main reasons for the high number of abortions in Ukraine are: low level of awareness of the population, relatively high price of hormonal and intrauterine contraceptives, lack of responsible behaviors in sexual relations among the population, especially among young people.

The risk of pregnancy resulting from a single unprotected sexual act is relatively high and is 33% depending on the day of the cycle. Unwanted pregnancy often leads to dangerous abortions and is associated with a very high risk of morbidity. Infertility, miscarriages and inflammatory diseases of the pelvic organs are the result of a large number of abortions and a lack of education in reproductive health. For example, 60-80% of women suffer from secondary infertility after abortion. Increasing public awareness and accessibility to contraceptive methods can reduce the number of unwanted pregnancies and abortions.

## II. Educational goals of the lesson

### 2.1 The student should know ( $\alpha$ -II):

- relevance and necessity of prevention of unwanted pregnancy and breast diseases in the framework of family planning services;
- anatomy and physiology of the genitals and mammary glands;
- major risk factors for breast disease, their relationship to family planning issues;
- method of examination of genitals and mammary glands;

- the main symptoms of breast diseases;
- contraceptive methods that help reduce the risk of breast disease;
- principles of breast self-examination when using contraceptive methods;
- advantages and disadvantages of all contraceptives;
- features of adolescent contraceptive use;
- features of the application of contraception after delivery;
- features of the use of contraception after abortion.

## 2.2 The student must be able to (α-III)

To master the skills:

- collecting a general and special medical history for women who plan to use contraceptives;
- identification of risk factors for the development of pathological reactions in women with breast and somatic diseases prior to contraceptive use;
- substantiation of urgency and necessity of prevention of breast diseases in the framework of providing family planning services;
- examination of the genitals and mammary glands;
- evaluation of the main side effects of combined oral contraceptives;
- evaluation of the main side effects of using purely progestin oral contraceptives;
- evaluation of the main side effects of intrauterine contraception;
- assessing the main side effects of using contraceptive barriers;
- selection of postpartum contraception;
- counseling on post-abortion contraception;
- risk assessment when using natural contraceptives.

To master the technique:

- conducting gynecological examination of female genital organs;
- breast examination and palpation;
- teaching women the principles of breast self-examination;

- counseling on various contraceptive methods;
- manipulation of DMPA injection;
- introduction of IUD;
- removal of IUD;
- the use of barrier methods of contraception (male condom);
- Emergency contraception counseling;
- technique for determining fertile days;
- counseling on lactation amenorrhea.

To master the skills:

- on the administration of contraceptives after delivery, taking into account the condition of the breast and somatic diseases;
- on the administration of contraceptives after abortion, taking into account the condition of the breast and somatic diseases;
- substantiate the urgency and need for prevention of breast diseases in the framework of family planning services;
- describe the relationship between major risk factors for breast disease and family planning issues;
- to evaluate the main side effects of different methods of contraception;
- selection of contraceptive methods that reduce the risk of breast disease and any side effects;
- justify the urgency and necessity of postpartum contraception;
- justify the urgency and necessity of post-abortion contraception.

### III. PERSONAL DEVELOPMENT GOALS

#### (EDUCATIONAL PURPOSE)

To educate students about the importance of preventing unwanted pregnancy and family planning among women of all ages and, above all, adolescents and students. Pay particular attention to the problem of preventing unwanted pregnancy and family planning for women with breast pathology and somatic diseases. Interest students in the detailed study of material on the problem of preventing unwanted pregnancy and family planning for the prevention of HIV and sexually transmitted infection. Enhance understanding of women's deontology and medical ethics in family planning counseling. To develop in students a sense of professional responsibility for their own actions, the fate of women before prescribing any medicines. Master the ability to make psychological contact with women of different age groups.

In order to strengthen the self-awareness, to focus students' attention on the role of domestic scientists in studying the problem of prevention of unwanted pregnancy and family planning.

#### ***IV. INTERDISCIPLINARY INTEGRATION***

<b>Discipline / Topics</b>	<b>Know</b>	<b>Be able</b>
<b>I. Previous disciplines (providing):</b>		
History of medicine	Contribution of domestic and foreign scientists to: - study of breast anatomy and physiology; - study of the problem of prevention of morbidity and mortality of women from breast pathology.	- Explain the contribution of scientists, especially domestic scientists, to the study of various aspects of breast pathology, prevention of unwanted pregnancy and family planning. - be able to give examples of outstanding domestic scientists and their outstanding scientific achievements in solving this problem.
Normal Human anatomy	- breast anatomy. - anatomy of female genital organs.	- interpret information about the anatomical structure of the mammary glands and genitals.

Histology and embryology	- morphofunctional features of the female body at different periods of development of the fertile egg.	- to interpret information about the peculiarities of the morphofunctional state of the female body in different periods of pregnancy
Pathological anatomy of the person	- pathological changes in the body of a woman, which lead to pathology of the mammary glands and genitals. - pathological changes in the mammary glands and genitals that can occur under the influence of medications.	- to interpret information about pathological changes in a woman's body and their relation to pathology of mammary glands and genitals. - be able to provide information and macro- / microscopically characterize changes occurring in the breast and genitals under the influence of various medications.
Pathological physiology with a course in clinical immunology	- pathological changes occurring in the body of a woman and disorders in the mammary glands and genitals, due to the use of different types of medicines. - aspects of formation and functioning of a woman's immune system in normal and during the use of hormonal drugs.	- to interpret information on the occurrence of disharmonious diseases and pathological changes in breasts in women who have had a negative impact of medications. - be able to provide information on the impact of immunological mechanisms in the formation of disharmonious diseases and
Microbiology	-features of infectious agents that cause STIs and their sensitivity to antibacterial drugs.	- be able to interpret the role of infection in the origin of genital diseases.

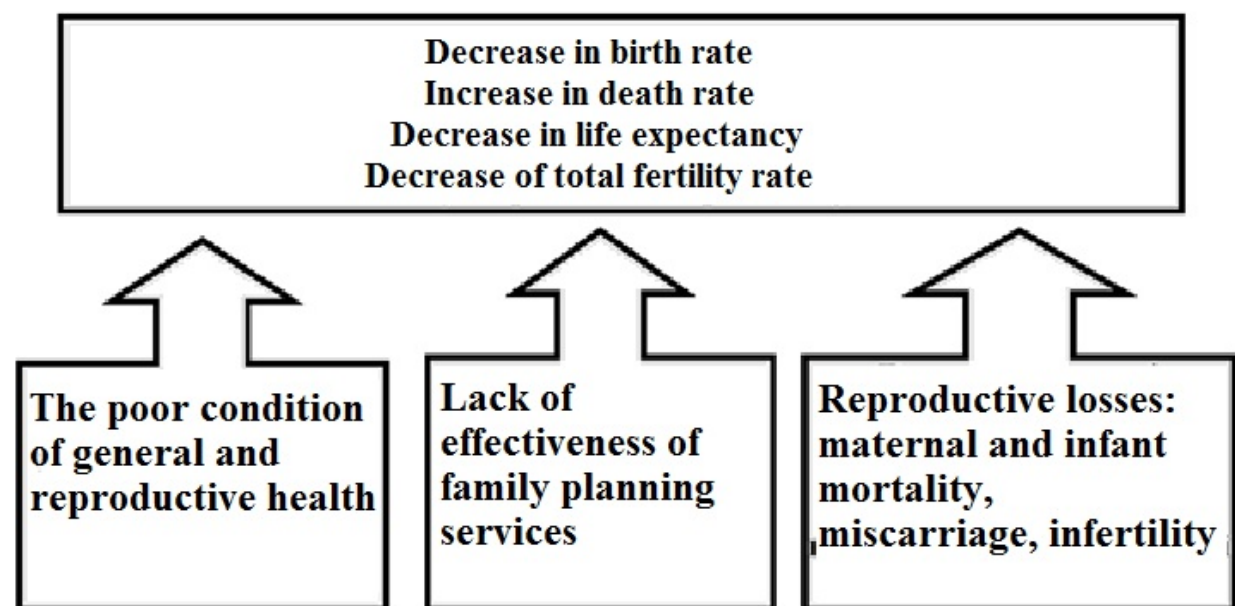


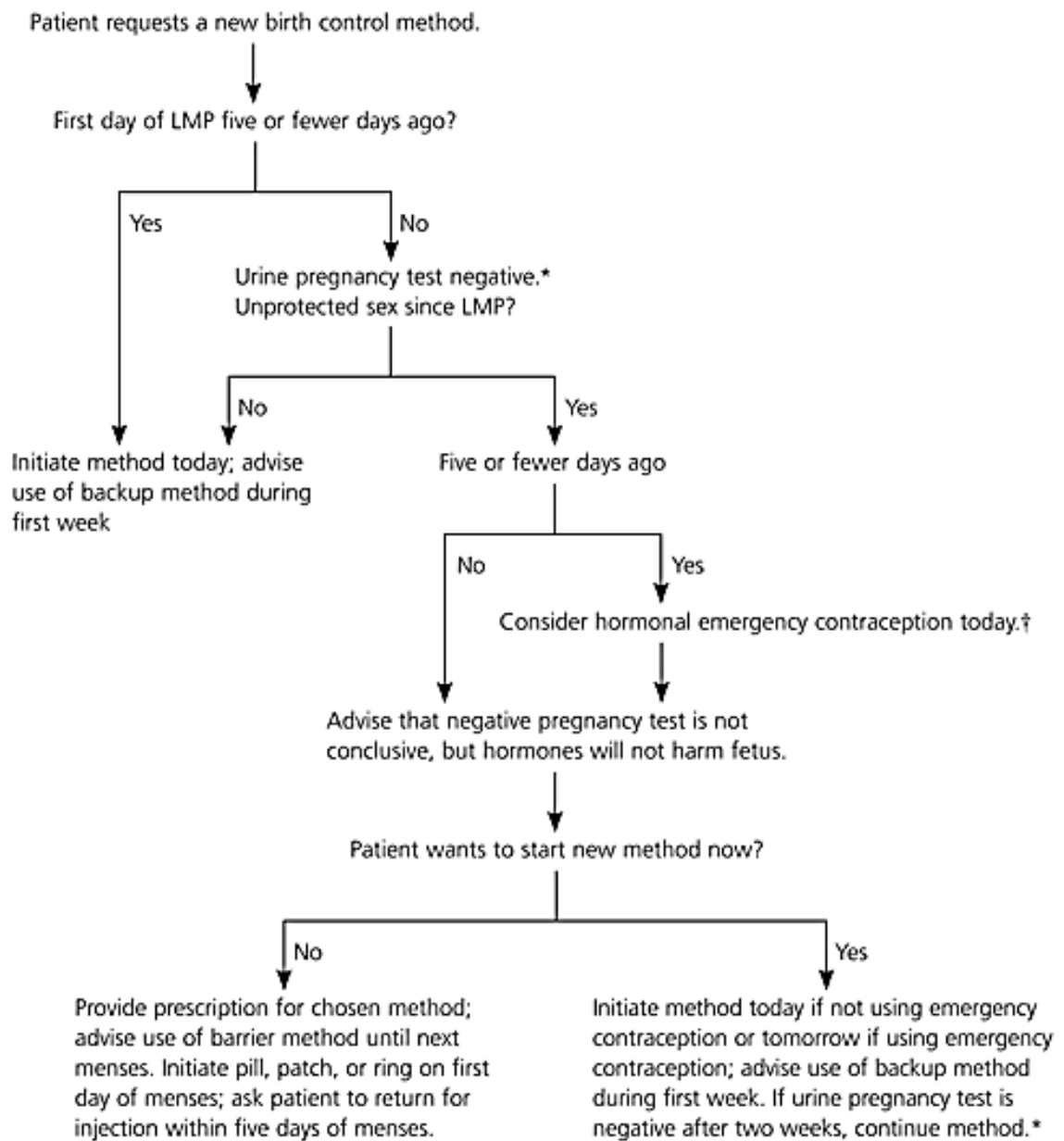
<b>II. The following disciplines (which ensure the acquisition of knowledge):</b>		
Neonatology	Rehabilitation measures for newborn girls and first-year girls whose mothers were exposed to medication during pregnancy.	Be able to develop a set of rehabilitation measures to improve the health of girls who have suffered a negative effect of medication during intrauterine stay.
Neurology	Possible early and late neurological symptoms in women resulting from abortion and pathology of the mammary gland, and methods for their early diagnosis and treatment.	Be able to recognize the neurological symptoms that have arisen from breast and post-abortion pathology, and to develop a complex of medical and diagnostic measures for these
<b>III. Intra-curricular integration:</b>		
Differential diagnosis of various disorders of the function of the female reproductive system	- classification of causes of infertility - classification of amenorrhea	- by means of the given classification to specify criteria of differential diagnostics of various disturbances of function of a female reproductive system
Principles of examination of women with infertility	- algorithm for examination of women with infertility	- to demonstrate the method of conducting external and internal gynecological examination
Ultrasound in the diagnosis of infertility	- the main criteria of ultrasound diagnostics	-demonstrate the possibilities of ultrasound examination in the office of functional diagnostics

Hysteroscopy as a method of diagnosis and treatment of various disorders of the female reproductive system	-main indications for hysteroscopic intervention	- to demonstrate the main steps in the hysteroscopic examination
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**V. CONTENTS OF THE TOPIC:  
STRUCTURAL-LOGICAL SCHEME OF LESSON**

# Demographic crisis





\*—If pregnancy test is positive, provide options counseling.

†—Because hormonal emergency contraception is not 100 percent effective, urine pregnancy test should be performed two weeks after emergency contraception use.

## **VI. PLAN AND ORGANIZATIONAL STRUCTURE OF THE LESSON:**

№ p / n	The main stages of the lesson, their functions and content	Levels of assimilat	Methods of control and training	Methodological support materials	Time min.
<b>I. Preparatory stage</b>					
1.	Organization of classes	II α	Individual oral survey. Test control Level II. Solution of typical level II problems.	Magazine Methodical developments  Questions for individual oral questioning. Level II test tasks. Typical level II tasks. Themed tables, posters, models; a selection of up-to-date literature on the issues under study; collection of results of instrumental methods of examination, results of laboratory examination.	
2.	Goal setting and motivation				
3.	Control of the initial level of knowledge, skills, abilities: 1. Relevance and necessity of prevention of unwanted pregnancy and breast diseases in the framework of family planning services. 2. Anatomy and physiology of genitals and mammary glands. 3. The main risk factors for breast disease, their relationship to family planning issues. 4. Methods of examination of genitals and mammary glands. 5. The main side effects of contraceptives. 6. Contraceptive methods that reduce the risk of breast disease. 7. Principles of breast self-examination while using contraceptive methods. 8. Advantages and				



## VII. MATERIALS OF METHODOLOGICAL ENSURING

### 7.1. Control materials for the preparatory stage of the lesson.

Theoretical basics of mastering the topic:

1. Define the term "family planning".
2. To define the term "contraception".
3. Define general provisions for post-natal family planning counseling.
4. Define general guidelines for post-abortion family planning counseling.
5. Define general provisions for adolescent family planning counseling.
6. Define general provisions for counseling on family planning for men.
7. Define general provisions for counseling on family planning for women with extragenital diseases.
8. Define general advice on family planning counseling for women with breast diseases.
9. Features of pharmacodynamics of hormonal contraceptives.
10. To define principles of selection of hormonal preparations for contraception.
11. To name modern and perspective methods of contraception.

Test Control Materials (II $\alpha$ )

A. Multiple Choice Test:

Condoms do not protect against:

1. pregnancy
2. hepatitis A
3. hepatitis B
4. STI
5. Hepatitis C.

6. tuberculosis
7. Chlamydia
8. mycoplasmosis
9. Herpes simplex virus
10. human papilloma virus
11. Toxoplasmosis

B. Addition test:

1. List two mandatory provisions for breast palpation:

- 1)
- 2)

2. List three breast palpation techniques:

- 1)
- 2)
- 3)

B. Test to establish the correct sequence

1. Establish the correct sequence of pathogens that require examination and treatment of both partners?

- 1) Trichomonas.
- 2) Candida.
- 3)  $\beta$ -streptococcus.
- 4) Herpes simplex virus.
- 5) Dederlein's wand.
- 6) Human papilloma virus.
- 7.) Cytomegalovirus.

8.) Mycoplasma.

9.) Toxoplasma.

10) HIV.

11) Tuberculosis.

Typical Level II Tasks:

Task 1.

Which of the following is incorrect in relation to human papillomavirus (HPV) infection?

Answers to choose from:

1) HPV (type 16 and 18) increases the risk of cervical cancer.

2) Sexual intercourse is the only way of infection.

3) Ceryocytes are pathognomonic for this infection.

4) HPV causes warts

5) The affected areas in the presence of acetic acid become white and clearly visualized during colposcopy.

Task 2.

The method of lactational amenorrhea (MLA) reliably protects a woman from pregnancy.

a. Until she has 2 menstrual cycles.

b. During the first 2 months after delivery in the absence of menstruation.

in. During the first 2-3 months after the mother begins to feed the baby extra food.

Problem 3.

Progestogen contraceptives cannot be used in the next category of women

Answers to choose from:

a. Women suffering from breast cancer.

b. Breastfeeding women.

in. Women suffering from side effects caused by taking COCs.



d. Women over 35 years.

## 7.2 Materials of methodological support for the main stage of the lesson

№ p / p	Tasks	Sequence of implementation	Remarks, warning about self-control
1.	<b>Patient survey (history)</b>	Follow these steps: 1) Main complaints 2) Additional complaints 3) Delayed somatic diseases and surgical interventions 4) Menstrual, sexual and reproductive function, nature of contraception 5) Gynecological diseases and genital surgery 6) Family history 7) History of the disease	The patient should be in a comfortable position (sitting)
2.	<b>Overview</b>	Follow these steps: 1) Variation of the physique of a woman 2) The nature of the hair and the condition of the skin 3) Breast examination 4) Belly examination 5) Palpation of the abdomen 6) Percussion and auscultation of the abdomen	At horizontal position of the patient is possible the occurrence of the syndrome aorto-forging compression.
3.	<b>Gynecological Review</b>	Follow these steps: 1) Give the patient a horizontal position 2) Review of external genitalia 3) Research using gynecological speculum 4) Bimanual vaginal examination (abdominal-vaginal, abdominal-rectal)	Emptied bladder and rectum.

### 7.3 Materials of control of the final stage of the class

#### Atypical Level III Task:

##### Task 1.

Choose acceptable methods of contraception for a teenager if she is having sex. Give the rationale for your choice. Define a patient monitoring plan.

- Regularly with 1 partner.
- Regularly, but with more than 1 partner.
- Irregular with 1 partner.
- Irregular with more than 1 partner.

Answer:

##### Task 2.

Choose acceptable methods of contraception for a woman of reproductive age under 35 if the woman:

- Married, gave birth.
- Married, not giving birth.
- Single, has 1 partner.
- Not married, has many partners.

Answer:

##### Problem 3.

Choose acceptable methods of contraception for a woman over 35 if she:

- Has regular sexual life.
- has 1 partner.
- has several partners.

Give the rationale for your choice. Define a patient monitoring plan.

Answer:

##### Problem 4.

Choose acceptable methods of contraception for a woman with a history of gynecology:

- Fibroids.
- Adenomyosis.

Give the rationale for your choice. Define a patient monitoring plan.

Answer:

Task 5.

Choose acceptable methods of contraception for a woman after an abortion performed in:

- 1st trimester.
- 2nd trimester.

Give the rationale for your choice. Define a patient monitoring plan.

Answer:

Problem 6.

Choose acceptable methods of contraception for a woman after childbirth if the woman:

- Practices breastfeeding.
- Does not breastfeed.

Give the rationale for your choice. Define a patient monitoring plan.

Answer:

Task 7.

Choose acceptable methods of contraception for an HIV-infected woman if she:

- - married, not giving birth, husband is HIV-negative.
- - married, not giving birth, husband HIV positive.
- - married, not giving birth, husband is HIV-negative.
- - married, not giving birth, husband HIV positive.

Give the rationale for your choice. Define a patient monitoring plan.

Answer:

Problem 8.

Choose acceptable methods of contraception for a woman who has a difficult somatic history:

- Smoking.
- Pathology of the cardiovascular system.

Give the rationale for your choice. Define a patient monitoring plan.

Answer:

Task 9.

Choose acceptable methods of contraception for a woman of reproductive age up to 35 years, with a breast hormone disease if the woman:

- Married, gave birth.
- Married, not giving birth.
- Single, has 1 partner.
- Not married, has many partners.

Give the rationale for your choice. Define a patient monitoring plan.

Answer:

Task 9.

Choose acceptable methods of contraception for a woman of reproductive age over 35 if the woman:

- Married, gave birth.
- Married, not giving birth.
- Single, has 1 partner.
- Not married, has many partners.

Give the rationale for your choice. Define a patient monitoring plan.

Answer:

**7.4 Materials of methodological support of students 'self-preparation (indicative map for organizing students' independent work with educational literature)**

<b>№ p / p</b>	<b>Training tasks</b>	<b>Instructions to the task</b>
1.	To analyze the demographic situation in Ukraine.	Identify current approaches to overcoming the demographic crisis in Ukraine.
2.	To determine the state of affairs regarding the effectiveness of modern contraception.	Analyze and summarize the state of play regarding the effectiveness of various methods of contraception.
3.	Draw conclusions from the analysis of the current literature on the effectiveness of various methods of hormonal contraception.	On the basis of the analysis of modern literature to make conclusions about the effectiveness of hormonal contraception.
4.	Investigate women's post-abortion health status from literature.	Summarize the literature on women's post-abortion health.
5.	The role of evidence-based medicine in family planning.	Give an example of evidence-based medicine in family planning.
6.	Deontological and psychological aspects of the doctor when using contraceptive methods.	Know the deontological and psychological aspects of the doctor when prescribed contraceptive methods.

## VIII. LITERATURE

### a) Educational.

#### Basic:

1. Obstetrics & gynecology : textbook / V. I. Gryshchenko [et al.] ; ed. by.: V. I. Gryshchenko, M. O. Shcherbina. - Kyiv : AUS Medicine Publ. - Vol. 2 : Gynecology. - 2nd ed. - 2018. - 352 p.
2. Gynecology: a textbook / ed. B.M. Wentkivsky, G.K. Stepankivska, M.E. Yarotsky. - K. : VSV Medicine, 2012. - 352 p.
3. Obstetrics and Gynecology: in 4 volumes: national textbook / no. ed. ; in a row. Academician of the National Academy of Medical Sciences of Ukraine, prof. V.M. It is blocked. - Volume 3: Non-surgical gynecology / qty. ed. ; in a row. Acad. NAMS of Ukraine, prof. V.M. It is blocked. - K. : VSV "Medicine", 2014. - 928 p.
4. Obstetrics and Gynecology. Tatarchuk TF, et al. Kiev: Medicine. - 2013.
5. Gynecology: a guide for doctors / VK Likhachev. - Vinnytsia: New Book, 2018. - 688 p.

#### Additionally:

1. Yu.Vdovichenko Pharmaceutical care when using contraceptives Tutorial. Kyiv, 2010. - 176 p.
2. Veal N.Ya. Vovk IB Family Planning. Tutorial. Kyiv, 2006. - 155p.
3. Medical eligibility criteria for contraceptive use. Third edition, 2004. World Health Organization. Trans. from English. - K. : Morion, 2006. - 264s.
4. Postpartum and postpartum family planning. Tutorial. Kyiv, 2007. - 195 p.
5. Tatarchuk TF, Solsky YP Endocrine gynecology (clinical essays). - K. : Testament, 2003. - 304 p.
6. Atlas of ultrasound diagnostics in obstetrics and gynecology. Dubile P., Benson K.B. 2009 Publisher: MEDPress-inform.
7. Gynecology. Illustrated clinical guide. Hart JM, Norman J. 2009 Publisher: Binom.
8. Outpatient care in gynecology / ed. V.A. Beniuk // Gynecologist doctor's guide. - 2nd ed., Suppl. - K. : Publishing House "Health of Ukraine", 2010. - 462 p. - (The series "Library" Health of Ukraine ).

9. A guide to practical skills in gynecology, obstetrics and neonatology / Ed. prof. AND I. Senchuk. - K .: Hydromax, 2006. - 368s.

b) Methodical.

1. Kazakov VM, Vitenko IS, Talaenko OM, Kamenetsky MS, Pervak MB, Kotlubey OV Development of methodological guidelines for students of higher medical educational establishments in accordance with modern state standards and principles of the Bologna process (Methodical recommendations for teachers of higher medical educational establishments of IY accreditation level): Kyiv-Donetsk: CMKMOZ of Ukraine, 2005.-158 p.

2. Miller VE Methodical bases of preparation and carrying out of educational employment in medical universities (manual): - Kyiv, Khreschatyk, 2006. - 80 p.

# **CURACY OF PATIENTS, PREPARATION OF TRAINING HISTORY OF DISEASE. PROTECTION OF EDUCATIONAL HISTORY OF DISEASE.**

## **TEST CONTROL**

### **I. SCIENTIFIC AND METHODOLOGICAL RATIONALE OF THE THEME (UPDATE):**

Patient curation, writing a medical history and protecting medical history are an important component of comprehensive, practically oriented training of medical faculty students, as well as a more thorough assessment of students' level of overall module control. When selecting patients for student supervision, particular attention is paid to the issue of compliance of the clinical diagnosis with the thematic plan of practical sessions on Module 3 "Diseases of female genital organs". The supervision of gynecological patients and the writing of the medical history aims to consolidate the basic practical skills in the discipline, namely the correct collection of anamnestic data and complaints of the patient, conducting external and internal gynecological research, taking material for bacterioscopic and cytomorphological examination, conducting cervicoscopic examination evaluation of laboratory and additional research methods, etc. An important component is the presence (sometimes participation as an assistant) of students during surgery in a patient who is in his supervision. Writing a medical history, and publicly defending it publicly, contributes to the consolidation of knowledge and the development of reasoning skills for their clinical findings, issues of differential diagnosis, justification of the final clinical diagnosis and the chosen tactics of patient management. There is a sense of conscious understanding of the need to take the right organizational and diagnostic measures, to carry out qualified treatment.

Carrying out a comprehensive summary module module, which includes writing tests, testing practical skills and oral interviews, is a summary part of the cycle and allows you to objectively evaluate the level of preparation of the student on the results of the cycle.

### **II. LEARNING OBJECTIVES:**

#### **2.1 The student should know ( $\alpha$ -II):**

- 1. Clinical anatomy and physiology of female genital organs.**
- 2. Special gynecological history.**
- 3. General and special methods of examination of gynecological patients.**



4. The main special methods of examination in gynecology: examination of the external genitals, speculum examination, bimanual examination.
5. Additional special methods of examination in gynecology.
6. Methods of functional diagnostics of the condition of the ovaries.
7. Laboratory methods of research in gynecology: microscopy of urogenital secretions, oncocytology, bacteriological studies, PCR, ELISA, pathomorphological studies.
8. Instrumental methods of examination in gynecology: probing of the uterine cavity, scraping the walls of the uterine cavity and cervical canal, biopsy, puncture of the abdominal cavity through the posterior arch.
9. Endoscopic methods of research in gynecology: colposcopy, hysteroscopy, laparoscopy.
10. Radiation research methods in gynecology: MPT, CT, MSH.
11. Ultrasound methods of research in gynecology: transvaginal and transabdominal ultrasound examination.
12. General symptomatology of gynecological diseases.
13. Classification of disorders of the functions of the organs of the reproductive system (menstrual function).
14. Amenorrhea: classification, diagnosis, tactics of general practitioners in amenorrhea.
15. Abnormal uterine bleeding: classification
16. Dysmenorrhea: etiology, classification, clinic, diagnosis, treatment.
17. Neuroendocrine syndromes in gynecology: premenstrual, menopausal, polycystic ovary syndrome, Sheehan syndrome, hyperprolactinemia, hyperandrogenia. Clinic, modern diagnostic methods, and principles of treatment.
18. The concept of cysts and tumors of the ovary.
19. Bartholin's cyst: clinic, diagnosis, complications, treatment.
20. Tumor formation of the ovaries: clinic, diagnosis, complications, treatment, tactics of a general practitioner.

21. Benign ovarian tumors (epithelial, pubic tumors, lipid-cell, germinogenic tumors) - clinic, diagnosis, complications, treatment, tactics of general practitioners.
22. Benign tumors of the uterus: clinic, diagnosis, complications, treatment, indications for surgical treatment, tactics of a general practitioner.
23. Endometriosis: etiology, pathogenesis, classification, clinic, diagnostics, modern methods of treatment, tactics of the general practitioner, methods of rehabilitation of reproductive function.
24. Background and precancerous diseases of the external genitals: etiology, classification, clinic, diagnosis, treatment.
25. Background and precancerous diseases of the cervix: etiology, classification, clinic, diagnosis, treatment.
26. Endometrial hyperplastic processes: etiology, pathogenesis, classification, diagnostics, treatment methods, GP
27. Prevention of background and precancerous diseases of female genital organs.
28. Malignant neoplasms of the external genitalia (vulvar cancer), vagina: classification, clinic, diagnosis, management tactics and treatment principles.
29. Cervical cancer: classification, clinic, diagnosis, management tactics and treatment principles.
30. Endometrial cancer: classification, clinic, diagnosis, management tactics and treatment principles.
31. Uterine sarcoma: classification, clinic, diagnosis, management and treatment principles.
32. Ovarian cancer: classification, clinic, diagnosis, management and treatment principles.
33. Uterine cancer: classification, clinic, diagnosis, management and treatment principles.
34. Trophoblastic diseases: classification, clinic, diagnosis, management and treatment principles.
35. The concept of microbiocinosis of the vagina.
36. Bacterial vaginosis: etiology, clinic, diagnosis, treatment.

37. Inflammatory diseases of female genital organs: classification, etiology, pathogenesis. Features of the course in different ages.
38. Inflammation of the external genitals and vagina (vulvitis, bartholinitis, vaginitis): clinic, diagnosis, treatment.
39. Inflammation of the internal genital organs (endocervicitis, endometritis, adnexitis, parametritis, pelvioperitonitis): clinic, diagnosis, treatment, tactics of a general practitioner.
40. Management of patients with purulent tubo-ovarian tumor, tactics of a general practitioner.
41. Indications for surgical treatment of inflammatory diseases of female genital organs.
42. Sexually transmitted diseases (trichomoniasis, gonorrhea, ureamyoplasmosis, chlamydia, viral lesions) General practitioner tactic in detecting sexually transmitted diseases.
43. Genital candidiasis: clinic, diagnosis, treatment.
44. Genital herpes: clinic, diagnosis, treatment.
45. Trichomoniasis: clinic, diagnosis, treatment.
46. Ureaplasmosis: clinic, diagnosis, treatment.
47. Chlamydia: clinic, diagnosis, treatment.
48. Gonorrhea: clinic, diagnosis, treatment.
49. Rehabilitation of women who have suffered inflammatory diseases of the female genital organs.
50. "Acute abdomen" in gynecology. Ectopic pregnant women  
Clinic, diagnosis, GP tactics, first aid.
51. Ovarian apoplexia: clinic, diagnostics, GP, first aid.
52. Rupture of an ovarian tumor capsule: clinic, diagnostics, general practitioner tactics, first aid.
53. Tumor Torsion: Clinic, Diagnosis, General Practitioner Tactics, Emergency.

54. Breaking of purulent tubo-ovarian tumor: clinic, diagnostics, tactics of the GP, first aid.
55. Disorders of nutrition of the myomatous node: clinic, diagnostics, tactics of the GP, first aid.
56. Traumatic injuries of genitals: clinic, diagnostics, tactics of the GP, first aid. Preoperative preparation and postoperative management of gynecological patients, anesthesia during gynecological operations.
57. Rehabilitation after gynecological interventions.
58. Causes of female and male infertility. Forms of female infertility.
59. Examination of a married couple in infertile marriage.
60. Principles and methods of treatment of female infertility (hormonal, surgical, modern reproductive technologies).
61. Family planning counseling: directions, benefits, counseling process.
62. General information on contraceptive methods: COC, vaginal ring, contraceptive patch, PTP, injectable, IUD, barrier methods and spermicides, voluntary surgical sterilization, emergency contraception.
63. Methods of recognition of fertility, assessment of the patient.
64. A routine examination is required before deciding whether to use a specific method of contraception.
65. Family planning for people living with HIV.

1.2 The student must be able to ( $\alpha$ -III):

To master the skills:

- collection of general and special medical history;
- to find out the patient's complaints, the time of their occurrence and their dynamics over time;
- general examination of the patient;
- conducting a special external gynecological examination, assessing the condition of the abdominal organs through the anterior abdominal wall (symptoms of peritoneal irritation);

- carry out examination with gynecological speculum;
- internal gynecological examination (abdominal-vaginal examination, abdominal-rectal);
- technique for collecting vaginal material to determine microflora;
- material sampling technique for cytomorphological research;
- method of stopping external bleeding with incomplete abortion.
- technique of fractional scraping of the uterine mucosa and cervical canal;
- technique of taking the material from the vagina for hormonal colpocytology;
- a technique for conducting a biopsy of the cervix;
- method of injection of medicinal substances (intramuscular, subcutaneous, intravenous streaming and drip);
- early termination of pregnancy;
- technique of probing of uterine cavity;
- method of taking material from the vagina and cervical canal for bacteriological examination.

### III. PURPOSE OF PERSONAL DEVELOPMENT (EDUCATIONAL OBJECTIVE):

To educate students about the importance of the problem associated with the acquisition of practical skills in gynecological practice, especially which are essential when working as a general practitioner and in providing emergency gynecological care (acute uterine bleeding, acute abdominal syndrome, etc.). Pay particular attention to the correct, methodologically validated approach to communicating with gynecological patients during their supervision. To deepen students' understanding of the importance of medical ethics and deontology in

communication with patients with various gynecological pathologies. To continue developing students' sense of professional responsibility for their own actions and the fate of the patient. To master the ability to deepen psychological contact with the gynecological patient.

Pay particular attention to the importance of combining their theoretical background with the acquisition of practical knowledge, as a key to success in conducting and final module control, and subsequently in the work of a practitioner.

#### IV. Interdisciplinary integration

Discipline	To Know	To Be Able
<b>I. Previous disciplines (providing):</b>		
<b>History of medicine</b>	- contribution of domestic and foreign scientists to study ethics and deontology issues in dealing with gynecological patients	- to consolidate the skills of correct, careful communication with gynecological patients in the collection of anamnesis and conducting a special gynecological examination - to interpret information about the structure
<b>Human anatomy and topographic anatomy</b>	- structure of external genitals; - structure of internal genitals	female genital organs, age differences of the genital organs
<b>II. The following disciplines (providing):</b>		
Surgery, urology	- possible surgical nosologies that may manifest complaints and clinical manifestations that require differential diagnosis with gynecological diseases	- diagnose diseases and complications from related organs
<b>III. Intra-curricular integration:</b>		
Differential diagnosis of planned and urgent conditions in gynecology	- major complaints and clinical manifestations of major gynecological diseases - to know the criteria for diagnosis of major gynecological diseases	- specify the criteria for differential diagnosis of planned and urgent conditions in gynecology
Principles of examination of women with gynecological diseases	- algorithm for examination of women with major gynecological diseases	- demonstrate the methodology of external and internal gynecological examination

Basic principles and standards of conservative therapy and basic types of surgery for various gynecological pathology	- principles and standards of conservative therapy of gynecological pathology -main indications for surgery in gynecological patients	-the main medicines used in gynecological practice -the main types of gynecological operations
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V. CONTENTS OF THE TOPIC:

STRUCTURAL-LOGICAL SCHEME

Zaporizhzhya STATE MEDICAL UNIVERSITY

Department of Obstetrics and Gynecology

SCHEME OF HISTORY OF DISEASE

Zaporizhzhya STATE MEDICAL UNIVERSITY

Department of Obstetrics and Gynecology

HeadDepartment \_\_\_\_\_

Teachergroups \_\_\_\_\_

HISTORY OF DISEASE

Fullname \_\_\_\_\_

CLINICAL DIAGNOSIS

main \_\_\_\_\_

complication of the underlying disease \_\_\_\_\_

concomitant \_\_\_\_\_

OPERATION (date, name) \_\_\_\_\_

\_\_\_\_\_

Name student (s) \_\_\_\_\_

Faculty \_\_\_\_\_ course \_\_\_\_\_

group \_\_\_\_\_

Starting curation \_\_\_\_\_

End of curation \_\_\_\_\_

Zaporizhzhia, 2020



## I. PASSPORT DATA

1. Last name, first name and patronymic \_\_\_\_\_
2. Age of the patient \_\_\_\_\_
3. Home Address \_\_\_\_\_
4. Working place \_\_\_\_\_
5. Position held \_\_\_\_\_
6. Who is directed \_\_\_\_\_
7. Date and time of hospitalization in the ward \_\_\_\_\_
8. Diagnosis of the institution that sent \_\_\_\_\_
9. Diagnosis at hospitalization \_\_\_\_\_
10. Clinical diagnosis (major, complication of underlying disease, concomitant)  
\_\_\_\_\_

## ANAMNESIS

Complaints of the patient during hospitalization in the ward. Separation of major and minor complaints, as well as their detail.

## III. HISTORY OF THIS DISEASE

### (ANAMNESIS MORBI)

Date of onset of the disease, how the disease started: acute or gradual; the onset of the symptoms of the disease from the outset, the symptoms that appeared first; symptoms that prevail now.

What the patient has to do with the disease are possible causes. How did the disease develop until the moment of treatment.

Diagnostic and therapeutic measures in different periods of illness. Data on previous diagnoses. What treatment was performed, how it affected the state of health. If

laboratory tests were performed, the results should be reported in this section of the medical history.

#### IV. HISTORY OF LIFE (ANAMNESIS VITAE)

##### 1. Transferred diseases

What diseases have you suffered since childhood. Surgery, trauma, sexually transmitted diseases, viral hepatitis, tuberculosis, cancer, etc. Disability data.

Gynecological diseases were transferred, their course, what treatment was carried out.

##### 2. Heredity

The health of the next of kin. The presence of relatives of cancer, diabetes, bronchial asthma, hypertension, coronary heart disease and other diseases with hereditary predisposition.

##### 3. Allergic history

Allergic diseases (bronchial asthma, urticaria, eczema, etc.) have a history of the patient and close relatives. Drug intolerance. Pre-existing history of anaphylactic shock and quinque edema.

##### 4. Hemotransfusion history

History of blood transfusions (year of blood transfusion, indications, complications). Donation.

##### 5. Bad habits

Alcohol use. Smoking, from what age, the number of cigarettes smoked per day. Drug intake, frequency, regularity.

#### V. SPECIAL ANALYSIS

##### 1. Menstrual function

The first menstrual period when established. The nature of menstruation, duration, intervals, regularity. Presence of pain before and during menstruation. Has the nature

of menstruation changed since the beginning of sexual life, after childbirth, abortion, gynecological diseases. Date of last menstruation.

## 2. Sexual function

The beginning of sexual life. The presence of pain during intercourse, their localization, bleeding. Marital status. Does it protect against pregnancy. The method of contraception and the duration of its use.

## 3. Childbearing function

After some time from the beginning of sexual life pregnancy came. Number of pregnancies, including childbirth, unauthorized and artificial abortions (course, complications). In case of infertility, if possible, establish the cause.

## 4. Secretarial function

The nature of vaginal discharge (color, odor, amount) when they appear and what their appearance is related to.

# VI. OBJECTIVE SURVEY DATA

## General overview of the patient

Overall condition: passable, moderate, severe, extremely severe. Situation of the patient: active, forced, passive.

State of consciousness: clear, darkened (stunning, obstructed, coma), arousal (euphoria, delirium, hallucinations).

Type of constitution: asthenic, normostenic, hyperstenic. Height, weight. Body temperature.

Skin: color, humidity, elasticity, the presence of rashes, postoperative scars, stretch marks, traces of cracks.

Soft tissue turgor: normal, reduced. Visible mucous membranes: color, humidity. Hair: female or male hair. Hirsutism.

Edema: symmetry, localization. Prudence.

Peripheral lymph nodes: morbidity, mobility.

## Respiratory

Frequency, rhythm of respiratory movements. Type of breathing (chest, abdomen, mixed). Dyspnea.

Palpation of the chest. Lung percussion. Auscultation of the lungs: assessment of the strength and nature of respiratory noises over symmetrical areas of the lungs: a) vesicular respiration (weakened, intensified, rigid), b) bronchial respiration (infiltrative, compression, cavity). Additional respiratory noises (dry wheezing, wet wheezing, crepitus, pleural friction noise).

## Cardiovascular system

Overview of the heart and large vessels. Heart throb. Pulsation of large arteries, jugular veins, carotid artery, positive venous pulse. Characteristics of the pulse on the radial arteries: frequency, rhythm, symmetry. Pulse deficit. Palpation of the heart area. Apex impulse, localization, width, strength. Percussion of the heart. Auscultation of the heart. Characteristics of heart tones. Determination of blood pressure on the brachial arteries.

## Gastrointestinal tract

Oral examination. Tongue, color, humidity, plaque.

Examination of the abdomen: examination of the abdomen (in the patient's position standing and lying), shape (configuration), the presence of peristaltic waves. Participation of abdominal wall in respiratory movements. Post-operative and other scars, hernias. Palpation of the abdomen. Superficial tentative palpation, degree of tension of anterior abdominal wall, tenderness, symptom of Shchetkin-Blumberg. Detection of free fluid in the abdominal cavity (ascites, blood) by fluctuation and percussion.

Palpation of the intestine. Liver palpation: nature of the edge, texture, tenderness, changes in the surface.

## Urinary system

Overview of the lumbar and supraorbital regions. Pasternatsky's symptom. Palpation and percussion of the suprapubic region.

## VII. Gynecological examination data

### Review of external genitals

The degree of development. Hair type (female, male). Enlargement of veins, glow of sexual gap, striations, ulcers, tumors, deformities. Lowering, vaginal walls, cervix, uterine body. Condition of posterior adhesions (scars after rupture of the perineum). The condition of the external opening of the urethra, paraurethral glands. Condition of the maiden float. The color of the vaginal pectoral.

### Examination of the cervix in gynecological speculum

The size and shape of the cervix, the shape of the outer pharynx, the color of the mucosa, the nature of discharge the cervix. Changes in the cervix (scars, tears, bruises, erosions, polyps, warts, etc.).

### Internal gynecological examination

Vagina, width of entrance, stretching, character of mucous (roughness, folding, smoothing). Condition of the vaults (free, short, protrusion, ripple, mucosal motility, tenderness). Cervix (size, shape, texture, surface).

### Bimanual (vaginal-abdominal, two-handed) vaginal examination

Uterine body: position (anteflexio, retroflexion, anterposition, retroposition, etc.), size, shape, consistency, surface, sensitivity, ratio of length of cervix to body of uterus.

Condition of the additives (size, tenderness, presence of tumors, etc.), state of parametric fiber.

## VIII. PREVIOUS DIAGNOSIS

It is based on anamnesis data and objective examination (justification). To do this, you must: identify the affected system; highlight the main, most pronounced features; group them into syndromes. Justify in detail each word presented before diagnosis.

## IX. LABORATORY AND ADDITIONAL RESEARCH METHODS AND THEIR INTERPRETATION

A follow-up plan is formulated to confirm the previous diagnosis.

1. Laboratory research methods (determination of blood group and rhesus factor, blood test for syphilis, antibodies to HIV, total blood count, platelet count and determination of fibrinogen and fibrin monomers, general urine analysis, C-reactive protein (according to indications) , procalcitonin level (as indicated), blood sugar, bacterioscopic analysis of discharge from 3 points (vagina, cervical canal, urethra), bacteriological examination of urine, blood and secretions from the cervical canal (as indicated), biochemical so far blood disappeared (total protein, creatinine, bilirubin, liver samples), oncocytopology and colpocytopology).
2. Consultations of related specialists (therapist, cardiologist, pulmonologist, nephrologist, endocrinologist and others).

## X. DIFFERENTIAL DIAGNOSIS

When conducting differential diagnosis, they rely on the main symptoms that are revealed during the collection of anamnesis, objective and gynecological examination of the patient, as well as data from laboratory and additional methods of research. It is necessary to identify and analyze at least three diseases that manifest clinically similar complaints and symptoms, as well as the most relevant for differential diagnosis in this patient.

## XI. CLINICAL DIAGNOSIS

Clinical diagnosis is based on the data of the previous diagnosis, the differential diagnosis and additional research methods. It is necessary to distinguish the underlying disease, complications directly related to it, and comorbidities that are not directly etiopathogenetic due to the underlying disease. When formulating a clinical final diagnosis should reflect the etiological and pathogenetic components of the disease, its morphological features, form, stage, stage of the disease, the functional state of the affected organs and systems, individual features of the disease.

## XII. ETIOLOGY AND PATHOGENESIS OF BASIC DISEASE

The etiology and pathogenesis of the patient should be considered. It is necessary to understand what etiological factor could have caused the disease, what conditions contributed to its appearance, how the disease developed in the future, what pathophysiological processes, biochemical and morphological changes and in what sequence the patient appeared. In the analysis of etiology and pathogenesis it is necessary to use the data of modern educational and scientific literature (for the last 5 years).

## XIII. FORECAST

The forecast is given for life, for health, for work.

## XIV. TREATMENT

It is necessary to justify the prescription of drugs for a specific patient. To distinguish etiotropic, pathogenetic and symptomatic treatment.

Treatment should include:

1. Mode.
2. Nutrition (diet).
3. Medications.
4. Physiotherapy.

5. Surgical treatment (if available) with details of indications for surgery and the course of surgery.

## XV. JOURNALS OF DISEASE

The diaries indicate complaints, general condition, blood pressure, heart rate, temperature, sleep, appetite. Language and abdominal examination data. Intestinal function, diuresis, nature of vaginal discharge. Post-operative wound condition (if any). Other changes occurring during the day.

## XVI EPICRIES

The epicrisis must include information that allows you to make a diagnosis, prognosis, treatment, rehabilitation measures, recommendations.

## XVII. REFERENCES

The sources of literature indicate the author, title, year of publication.

The temperature record with curves of the pulse, temperature, blood pressure must be added to the medical history.



## VI. PLAN AND ORGANIZATIONAL STRUCTURE OF THE EMPLOYMENT:

№ p / p	The main stages of the lesson, their functions and content	Levels of assimilation	Learning control methods	Methodological support materials	Time min.
<b>I. Preparatory stage</b>					
1.	Organization of classes	II $\alpha$	Individual oral questioning.	Methodical development  Sick. Case histories Phantoms, models, slides.	5min.
2.	Setting educational goals and motivation				20min.
3.	Primary Teacher History Check.				
<b>II. The main stage</b>					
4.	Protecting the educational history of the disease 1) checking the practical skills near the bedside of the patient who was supervised 2) individual protection of the school medical history in the presence and active participation in the discussion of all students of the group	III $\alpha$	Practical training Analysis and evaluation results clinical work.	Algorithms for formation practical skills. Patients. Illnesses. Gynecological tools for examination gynecological patient. Phantoms. Models.	50min.
5.	Writing tests and situational tasks Final module control.	III $\alpha$	Professional training in solution tests of the final module control	Tests of Final Modular Control	1hour 20min.
<b>III. The final stage</b>					
6.	Verification of test tasks of the Module Final Control.	III $\alpha$	Level III test control.	Level III test tasks.	20min.
7.	Summarizing the cycle.				5min.

## VIII. MATERIALS OF METHODOLOGICAL ENSURING

### 7.1. Control materials for the preparatory stage of the lesson.

Theoretical basics of mastering the topic:

1. Clinical anatomy and physiology of female genital organs.
2. General methods of examination of gynecological patients.
3. Basic special methods of examination in gynecology: examination of the external genitals, speculum examination, bimanual examination.
4. Additional special methods of examination in gynecology (laboratory, instrumental, endoscopic, radiation and ultrasonic methods of examination).
5. General symptomatology of gynecological diseases.
6. Classification of disorders of the functions of the organs of the reproductive system (menstrual function).
7. Amenorrhea: classification, diagnosis, tactics of a general practitioner in amenorrhea.
8. Abnormal uterine bleeding: PALM / COEIN classification.
9. Dysmenorrhea: etiology, classification, clinic, diagnosis, treatment.
10. Neuroendocrine syndromes in gynecology: premenstrual, menopausal, polycystic ovary syndrome, Sheehan syndrome, hyperprolactinemia, hyperandrogenia. Clinic, modern diagnostic methods, and principles of treatment.
11. The concept of cyst and ovarian tumors.
12. Cyst and abscess of the Bartholin gland: clinic, diagnosis, complications, treatment.
13. Benign ovarian tumors (physiological, epithelial, germ cell tumors, germinogenic tumors) - clinic, diagnostics, complications, treatment, tactics of general practitioners.
14. Uterine body leiomyoma: clinic, diagnosis, complications, treatment, indications for surgical treatment, tactics of a general practitioner.

15. Endometriosis: etiology, pathogenesis, classification, clinic, diagnostics, modern methods of treatment, tactics of a general practitioner, methods of rehabilitation of reproductive function.
16. Background and precancerous diseases of the external genitals: etiology, classification, clinic, diagnosis, treatment.
17. Background and precancerous diseases of the cervix: etiology, classification, clinic, diagnosis, treatment.
18. Hyperplastic processes of the endometrium: etiology, pathogenesis, classification, diagnosis, methods of treatment, tactics of general practitioners.
19. Malignant neoplasms of the external genitalia (vulvar cancer), vagina: classification, clinic, diagnostics, management tactics and treatment principles.
20. Cervical cancer: classification, clinic, diagnosis, management tactics and treatment principles.
21. Endometrial cancer: classification, clinic, diagnosis, management tactics and treatment principles.
22. Uterine sarcoma: classification, clinic, diagnosis, management and treatment principles.
23. Ovarian cancer: classification, clinic, diagnosis, management and treatment principles.
24. Uterine cancer: classification, clinic, diagnosis, management and treatment principles.
25. Trophoblastic diseases: classification, clinic, diagnosis, management and treatment principles.
26. The concept of microbiocinosis of the vagina.
27. Bacterial vaginosis: etiology, clinic, diagnosis, treatment.
28. Inflammatory diseases of female genital organs: classification, etiology, pathogenesis. Features of the course in different ages.
29. Inflammation of the external genitals and vagina (vulvitis, bartholinitis, vaginitis): clinic, diagnosis, treatment.

30. Inflammation of the internal genital organs (endocervicitis, endometritis, adnexitis, parametritis, pelvioperitonitis): clinic, diagnosis, treatment, tactics of a general practitioner.
31. Management of patients with purulent tubo-ovarian tumor, tactics of a general practitioner.
32. Indications for surgical treatment of inflammatory diseases of female genital organs.
33. Sexually transmitted diseases (candidiasis, herpes, trichomoniasis, gonorrhea, ureamyoplasmosis, chlamydia, viral lesions) General practitioner tactic in detecting sexually transmitted diseases.
34. Rehabilitation of women who have suffered inflammatory diseases of the female genital organs.
35. "Acute abdomen" in gynecology. Ectopic pregnancy: clinic, diagnostics, general practitioner tactics, first aid.
36. Ovarian apoplexia: clinic, diagnostics, GP, first aid.
37. Rupture of an ovarian tumor capsule: clinic, diagnostics, GPs, first aid.
38. Tumor Torsion: Clinic, Diagnosis, General Practitioner Tactics, Emergency.
39. Rupture of purulent tubo-ovarian tumor: clinic, diagnostics, tactics of general practitioner, first aid.
40. Disorders of the myomatous node: clinic, diagnostics, tactics of a GP, first aid.
41. Causes of female and male infertility. Forms of female infertility.
42. Examination of a married couple in infertile marriage.
43. Principles and methods of treatment of female infertility (hormonal, surgical, modern reproductive technologies).
44. Counseling on family planning: directions, benefits, counseling process.
45. General information about contraceptive methods: COC, vaginal elbow, contraceptive patch, PTP, injectable, IUD, barrier methods and spermicide, voluntary surgical sterilization, emergency contraception.
46. A routine examination is required before deciding whether to use a specific method of contraception.

#### 47. Family planning for people living with HIV.

#### Materials (Sample Situational Tasks) for Final Test Control (II $\alpha$ )

##### Situational problem 1.

The 55-year-old patient has been admitted to the gynecological hospital with complaints of minor bleeding from the genital tract over the last three months. Last menstruation was 3 years ago. Objective study draws attention to obesity 1-2 degrees, blood pressure - 160/100 mm Hg. Art. Bimanual: The cervix is shortened, the outer eye misses the tip of the finger. The body of the uterus is enlarged to 6-7 weeks of pregnancy, painless, mobile. The uterine appendages are not palpable. The vaginal discharge is bloody, small.

Question: 1) What previous (at hospitalization) diagnosis can be made? 2) What are the most likely causes of postmenopausal bleeding? 3) How large will the clinical diagnosis be?

Answer: 1) Menopause disorders. Abnormal uterine bleeding in the postmenopausal period.

2) Malignant neoplasms of the body of the uterus or cervix; uterine body leiomyoma; endometrial hyperplastic processes.

3) Ultrasound examination of the pelvic organs and abdomen (CT examination according to the testimony); cytological examination of the vaginal part of the cervix and cervical canal; colposcopic examination (target biopsy of the cervical poppy according to the testimony); hysteroscopy (fractional scraping of the mucous membrane of the uterus).

##### Situational problem 2.

A 28-year-old woman with zero reproductive parity during menstruation experiences pain in the lower abdomen of a bursting nature, 2-3 days before menstruation, a woman notes the presence of dark blood ("chocolate"), slight vaginal discharge. A history of chronic adnexitis, 3 courses of anti-inflammatory therapy with no significant effect. In bimanual examination: the uterus body is slightly enlarged mainly in the anterior-posterior size, dense, sensitive, to the left of the uterus body is determined tumor formation of 7x7 cm in size of uneven consistency, sensitive at displacement, limited mobility.

Question: 1) What preliminary diagnosis can be made? 2) What scope of the examination will allow the clinical diagnosis to be verified? 3) What is the therapeutic tactic after confirming the clinical diagnosis?

Answer: 1) Genital endometriosis. Endometrioid cyst of the left ovary.

2) Ultrasound examination of pelvic organs (MRI examination of pelvic organs); determination of blood tumor markers (CA-125, NOT 4, ROMA index); fibrogastroduodenoscopy and fibrocolonoscopy); diagnostic laparoscopy (with possible expansion of the volume of intervention to cystectomy of the left ovary).

3) When confirming the diagnosis of genital endometriosis, a combination of organ-saving surgery and hormonal therapy.

## VIII. RECOMMENDED BOOKS

### Basic:

1. Obstetrics & gynecology : textbook / V. I. Gryshchenko [et al.] ; ed. by.: V. I. Gryshchenko, M. O. Shcherbina. - Kyiv : AUS Medicine Publ. - Vol. 2 : Gynecology. - 2nd ed. - 2018. - 352 p.
2. Obstetrics and Gynecology: Workshop / VK Likhachev [et al.]; Ministry of Health of Ukraine, Higher Medical Institute of Ukraine "Ukrainian Medical Dental Acad." - Poltava: Divosvit, 2014. - 200 p.
3. Gynecology: a textbook / ed. B.M. Wentkivsky, G.K. Stepankivska, M.E. Yarotsky. - K.: VSV Medicine, 2012. - 352 p.
4. Obstetrics and Gynecology: in 4 volumes: national textbook / no. ed .; in a row. Academician of the National Academy of Medical Sciences of Ukraine, prof. V.M. It is blocked. - Vol. 3: Non-surgical gynecology. - K.: VSV "Medicine", 2014. - 928 p.
5. Gynecology: a guide for doctors / VK Likhachev. - Vinnytsia: New Book, 2018. - 688 p.

### Additionally:

1. Munro M. G. Abnormal uterine bleeding. Cambridge: Cambridge University Press, 2010.
2. Zaporozhan VM Operative gynecology / VN Zaporozhan. - Odessa: ODMU, 2006. - 448 p.
3. Emergency surgical care in obstetrics and gynecology / LB Markin, Yu. P. Spizhenko, BM Ventskovsky [and others]. - Lviv: World, 1992. - 120 p.
4. Emergency conditions in obstetrics: teach. tool. for students. higher. honey. teach. closed / OA Burka [and others]; row: B. M. Ventskivskyi, A. Ya. Senchuk, OO Zelinsky. - Odessa: TPP, 2011. - 260 p.
5. Tatarchuk TF, Solsky YP Endocrine gynecology (clinical essays). - K .: Testament, 2003. - 304 p.
6. A. DeCherney, H. Obstetrics and gynecology: diagnosis and treatment: a textbook for medical students: in two volumes / A. H. DeCherney, L. Nathan; ed. AN Strizhakov; trans. with English. [M. A. Mayevsky, RV Parmenov]. - Moscow: MEDPress-Inform, 2008-2009.

7. Dubile P. Atlas on ultrasound diagnostics in obstetrics and gynecology / PM Dubile, KB Benson; trans. with English. ; under common. ed. V. E. Gazhonova. - 3rd ed. - M.: Medpress-inform, 2011. - 328 p.
8. Hart D. M.K. Gynecology: an illustrated clinical guide / D.M.K. Hart, D. Norman; trans. with English. [AND. Sokolov, etc.]; under common. ed. VN Prilepskoy. - Moscow: Binom, 2009. - 463 sec.
9. Outpatient care in gynecology / ed. V.A. Beniuk // Gynecologist doctor's guide. - 2nd ed., Suppl. - K .: Publishing House "Health of Ukraine", 2010. - 462 p. - (The series "Library" Health of Ukraine ").
10. Algorithms in Obstetrics and Gynecology / Ed. V.A. Benyuk // Doctor's Guide. - K .: Doctor-Media LLC, 2009. - 428 p. (Library series "Health of Ukraine").
11. Handbook of practical skills in gynecology, obstetrics and neonatology / Ed. prof. AND I. Senchuk. - K .: Hydromax, 2006. - 368 p.
12. Order of the Ministry of Health of Ukraine No. 676 of December 31, 2004. "On the approval of clinical protocols in obstetric and gynecological care."
13. Electronic document "Adapted clinical guidelines based on evidence of" Abnormal uterine bleeding ", 2016.
14. National consensus on the management of patients with abnormal uterine bleeding of the Association of Gynecologists and Endocrinologists of Ukraine. Reproductive endocrinology. 2015; 1 (21): 8-12.
15. Order of the Ministry of Health of Ukraine No. 319 dated 06.04.2016 "Unified clinical protocol of primary, secondary (specialized) and tertiary (highly specialized) medical care. Tactics of managing patients with genital endometriosis », 2016.
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