

**The Ministry of Health of Ukraine**  
**National Pirogov Memorial Medical University, Vinnytsia**

«AGREED»  
at Methodical meeting  
of surgical disciplines  
protocol № 5  
from «22» 05 2024

Head of Methodical meeting  
of surgical disciplines

  
\_\_\_\_\_  
Professor  
Oleg KANIKOVSKY

"APPROVED"  
by Academic council  
National Pirogov Memorial  
Medical University  
protocol № 9  
from "25" 04 2024

Head of Academic council,

  
\_\_\_\_\_  
Professor  
Victoriaia PETRUSHENKO

**Instructions for the student to the station № 8**  
**" Gynecological patient"**

The practical component of the objective structured practical (clinical) exam (OCP(K)E) will be held in a one-day format.

The student must greet and introduce himself, present to the teacher a passport (or identity document).

Microsoft Teams platforms will be used when conducting OSP (C)E online.

Requirements for passing the station:

- use of a computer or laptop by both the student during the answer and the examiner;
- the answer is accepted under the condition of the included camera, where the student who passes the exam is clearly visible, and the included microphone with a clear sound;
- during the work at the station a video recording is made, about which the examiner warns the student in advance.

The secretary liaises with the groups taking the exam. Connects each student to the examiner and the task is sent in the Microsoft Teams chat. The oral answer provides an assessment by the student of the patient's complaints (will be presented), anamnestic and objective data, interpretation of the results of laboratory and instrumental methods of research

determining the tactics of the patient and the appointment of treatment, indicating the group of drugs and their side effects, as well as give a brief answer to additional questions of the examiner, provided they are present in the task.

The duration of the station is 5-7 minutes.

After the allotted time to perform clinical tasks, the examiner does not accept the answer. Please note that the teacher is an observer of your actions and does not provide instructions, comment or question.

It is forbidden to use a mobile phone and other electronic gadgets, to transmit, copy and take out any information related to the exam.

When conducting OSP (K) I in the usual mode, the student must, at the invitation of the secretary, go to the door of the examination room.

While waiting for the exam, carefully read the "information for the student" on the door. This will help you get the necessary patient information that does not need to be repeated when interviewing a standardized patient. Before the exam you will be issued a badge with your number / name. This badge must be worn so that it is visible to examiners throughout the exam.

You will switch between the two stations "Obstetric Patient" and "Gynecological Patient", spending up to 10 minutes each. A call will sound at the beginning of the exam. This will give you a signal before the exams start. Knock on the door before entering the examination station. If there is a standardized patient at the station, meet the patient's gaze, introduce yourself to the patient. Remember that you have to make a good impression, address the patient by name. Follow a clear, calm style of conversation with the patient, never interrupt the patient when he answers your questions.

Before the exam you will receive a card with station numbers. This is your individual route, you must strictly follow the sequence of stations specified in it. At each station you will be given clear written instructions on what is required of you. Please read them carefully. When completing a task, think about the structure of the task, its various components, hidden goals. This will allow you to quickly identify the dominant area of research (collection of medical history / history, collection of complaints, examination, evaluation of laboratory and instrumental research methods, communication skills). Do not rush to make a diagnosis, make a differential diagnosis, think about the preliminary diagnosis, answer all the tasks.

Complete the task. Leave the examination station. If you have not completed the task at the station and the time for the task has elapsed, you should stop at this stage of the task and leave the station.

Enter and leave the station strictly at the signal or invitation of the teacher or tutor.

To move to the next station you will be given a certain amount of time, which must be strictly adhered to.

During the transition from station to station do not talk, do not make unnecessary movements, do not make noise.

### **Example of a clinical task to the station "Obstetric patient"**

A 48-year-old G3 P3 woman complains of a 2-year history of loss of urine four to five times each day, typically occurring with coughing, sneezing, or lifting; she denies dysuria or the urge to void during these episodes. These events cause her embarrassment and interfere with her daily activities. The patient is otherwise in good health. A urine culture performed 1 month previously was negative. On examination, she is slightly obese. Her blood pressure is 130/80 mm Hg, her heart rate is 80 beats per minute, and her temperature 99°F (37.2°C). The breast examination is normal without masses. Her heart has a regular rate and rhythm without murmurs. The abdominal examination reveals no masses or tenderness. A midstream voided urinalysis is unremarkable. The doctor places the cotton tip applicator in the urethra, the movement of the applicator is more than 45 degree.

Haemoglobin 127 g / l

Red cell count  $3.3 \times 10^{12}$  / l

White cell count  $5.4 \times 10^9$  / l

Platelets  $234 \times 10^9$  / l

Total protein 62 g / l

- What is the most likely diagnosis?
- Diagnostic plan?
- What is the best initial treatment?
- Complications of therapy

Evaluation criteria	Points	Stud
Diagnosis Stress urinary incontinence	Up to 0.5	
Examination and / or analysis - Q-test - hypermobility of the urethra (more than 300)	Up to 1	
Examination plan: Ultrasound of the bladder to determine the bladder-urethral angle and hypermobility of the urethro-vesical segment, determination of the volume of residual urine. Uroflowmetry. Profilometry of intraurethral pressure. General urine analysis	Up to 1	
Further treatment plan Kegel exercises, pessary, or urethropexy	Up to	

	1	
Complications: Pesaro - the occurrence of bedsores, progression of prolapse, bacterial vaginosis;	Up to 1	
Complications: Surgery - damage to the vessels of the bundle and adjacent organs, the formation of fistulas, recurrence of prolapse	Up to 0.5	

**The maximum number of points per station is 5**

### List of clinical tasks

#### 1

The 26-year-old patient consulted a gynecologist with complaints about the absence of menstruation for 6 months, weight gain, increased hair growth over the upper lip, abdomen, thighs, skin problems in the form of inflammatory rashes on the face and back.

From the anamnesis it is known: menstruation from 15 years, irregular (duration of a menstrual cycle 36-45 days), sparse, painless, last menstruation 6 months ago. Sex life from 21 years. For the last 2 years she has been living a regular sexual life, she did not prevent pregnancy, she did not get pregnant.

**Objectively:** the general condition of the woman is satisfactory, height 1.68 m, weight 85 kg, BMI-30.1 kg / m<sup>2</sup>. The skin is pale pink, glistening on the face, with acne elements, hyperpigmentation is determined in the neck. Arterial pressure- 130/80 mm Hg. Heart rate - 88 / min. respiratory rate - 17 / min. SaO<sub>2</sub> - 97%. The pregnancy test is negative.

**Speculum examination:** vaginal mucosa and cervix without features.

**Bimanual:** uterus in anteversio-anteflexio, slightly reduced in size, normal shape, dense consistency. Appendages on both sides are palpable-enlarged and compacted. The vaults are free.

**According to the result of ultrasound:** myometrium without features, M-echo 13 mm, ovaries enlarged due to multiple follicles (more than 12 in section), located under the thickened teka in the form of a "necklace", in sizes up to 4-6 mm, the volume of the right ovary 11.4 cm<sup>3</sup>, the left -14.1 cm<sup>3</sup>.

Tasks:

1. Formulate a diagnosis.
2. Justify the diagnosis.
3. Offer your plan for examination and management of the patient.

4. With what disease in this patient it is necessary to make a differential diagnosis?
5. Possible immediate and long-term results of the disease.

2

Woman, 25 y.o, was admitted to the gynecological department with complaints on severe pain in the lower abdomen with irradiation to shoulder and scapula, fainting. Menarche at 14 years, periods are regular, last 4-5 days in every 29 days. LMP was 1,5 month ago. BP – 90/60 mmHg. Pulse – 110 beats/min.

Physical exam: darkening in the eyes, noise in the ears. Abdomen is bloated, painful during palpation, defans, symptoms of peritoneal irritation are positive in the lower abdomen.

Speculum examination: uterine cervix is normal, external os is closed.

PV: uterus in anteflexion-version position, isn't enlarged, mobile, painless. Palpation of the left appendages is complicated because of defans and painfulness of abdominal wall. Back vault is over hanged, painful, Solovyov`s and Promptov`s symptoms are positive. Discharges are mucous.

Investigations	Results	Referent ranges
Hb	88 g/l	120-140 g/l
Erythrocytes	$2,6 \times 10^{12}/l$	$3,7-4,7 \times 10^{12}/l$
Leukocytes	$9 \times 10^9/l$	$4,0-9,0 \times 10^9/l$
Hematocrit	24%	36-42%
Platelets	$120 \times 10^9/l$	$150-390 \times 10^9/l$
Загальний білок	35 g/l	60-85 g/l

Assignments:

1. What is the primary diagnosis?
2. Differentiate diagnosis
3. Algorithm of the doctor`s actions
4. Infusion therapy
5. Prophylaxis and diagnostics of another tube`s occlusion.

3

A 35-year-old woman went to the doctor with complaints of dull, aching pain in the depths of the pelvis, lower abdomen, lumbosacral region, dyspariuria. Before and during menstruation, the pain intensifies, radiates to the side wall of the pelvis and leg, there are dysuric phenomena, painful tenesmus, bloody discharge from the rectum.

Speculum examination: the cervix is clean, the external os is closed.

Vaginal examination: the uterus is mobile, dense, not enlarged, painless. There is an infiltrate behind the cervix at the level of the inner os, sharply painful, hilly, immobile. Uterine appendages without features.

Indicator	Actual indicator	Reference values
HGB-hemoglobin	120 g/L	120-140 g/L
WBC -white blood cells	$8.0 \cdot 10^9/L$	$4.0-9.0 \cdot 10^9/L$
PLT -platelets	$220 \cdot 10^9/L$	$150-350 \cdot 10^9/L$
RBC - erythrocyte	$4,1 \times 10^{12}/L$	$3,7-4,7 \times 10^{12}/L$
Total protein	72 g/l	60-85 g/l
Bilirubin	19,6 $\mu\text{mol} /l$	3,4-20,6 $\mu\text{mol} /l$
Albumin	50 g/l	35-50 g/l
Protein in the urine	absent	absent

Tasks:

1. Preliminary diagnosis
2. Differential diagnosis
3. Additional methods of diagnostics
4. Treatment
5. Complications of therapy

#### 4

A 42-year-old patient went to the doctor with complaints of heartburn, itching in the vagina, the presence of discharge. From the anamnesis it is known that the woman had 2 births. There were no abortions or miscarriages. Three weeks ago, she fell ill with COVID-19, complicated by bilateral pneumonia. Received antibiotic therapy for 10 days. The general condition of the woman is satisfactory, Ps 74 /min, arterial blood pressure 135/85 mm Hg. Respiration rate 14 per minute.

The abdomen is soft, painless. At gynecological inspection it is established: the mucous membrane of a vagina at speculum inspection is hyperemic, with a white layer. The neck is formed, the vaginal part is hyperemic. Discharge is in significant quantities, whitish color, cheese-like consistency.

Bimanual examination revealed that the uterus and appendages were without pathological changes. Pseudohyphae and blastospores were detected in vaginal secretions by microscopy.

Blood counts.

Indicator	In patient	Reference values
HGB-hemoglobin	120 g/L	120 - 160 g/L for women
WBC -white blood cells	$3.7 \cdot 10^9/L$	$4-5 \cdot 10^9/L$ for women
HTC -hematocrit	48 %	36 – 46 % for women
PLT -platelets	$330 \cdot 10^9/L$	$180 - 320 \cdot 10^9/L$ for women
NEU - neutrophils	63 %	70 – 74 %
LYM- lymphocytes	15 %	22 – 26 %
EOS - eosinophils	2 %	1,5 – 2 %
Bas - basophils	0.5 %	0,5 – 1 %
Mon - monocytes	19.5 %	3 – 6 %
ESR- erythrocyte sedimentation rate	22 mm/h	from 0 до 20 mm in women
D- dimer	0.56 mcg FEU /ml	0.55 mcg FEU /ml
Ferritin	120	10 – 120 in women

Tasks:

1. What is the preliminary diagnosis?
2. What additional research can be used?
3. What is the treatment of this pathology?
4. Criteria of curability.

5

The patient S., 32 years old, went to the gynaecologist for brown discharge from the genital tract. It appears before and after menstruation and lasts 3-4 days.

From the anamnesis: 4 months ago a medical abortion was performed.

While speculum examination: cervix without any features. At bimanual research: uterus in anteversio - anteflexio, a little bit enlarged, round form with dense consistence. Appendages on both sides are not palpable.

Objectively - the general condition of the woman is satisfactory. Drowsiness is noted. Palpation of the abdominal cavity without features. Blood pressure - 115/70. Heart rate - 68 / min. BH - 20 / min. SaO<sub>2</sub> - 97.

On ultrasound: the myometrium has a heterogeneous structure, the anterior wall of the uterus is thicker than the posterior, the boundary between the endometrium and myometrium is blurred.

### **Questions:**

1. Formulate and justify the diagnosis.
2. Etiology and pathogenesis of the disease.
3. Suggest your plan for examination and management of the patient.
4. With what extragenital diseases at the given patient it is necessary to carry out differential diagnosis?
5. Possible long-term results of the disease.

## **6**

A 55-year-old female patient during a routine examination revealed a tumor formation in the left ovary. The woman does not present any complaints.

From the anamnesis: menarche from the age of 12. The menstrual cycle is regular, 4 days after 28 days, painful. Menopause 3 years. Childbirth - 1, abortion - 2. Her grandmother died of breast cancer.

Gynecological examination: the external genital organs are developed correctly, hair growth is female.

Speculum examination: the mucous membrane of the vagina and cervix is clean.

Bimanual examination: the body of the uterus is of normal size, mobile, painless. The enlarged left ovary is palpable (up to 8 cm), mobile, not painful on palpation. Allocation of mucous membranes, moderate.

Ultrasound of the pelvic organs: the uterus is not enlarged. The thickness of the M-echo is 5 mm. A volumetric formation of the left ovary with dimensions of 7x8 cm is



determined. Free fluid is determined in the abdominal cavity. No enlarged retroperitoneal lymph nodes were found.

During the laparotomy approach, multiple metastatic foci in the peritoneum were found, the size of the metastases was more than 2 cm. During the operation, a cytological study of the tumor tissue of the ovary — adenocarcinoma — was carried out. A study of ascitic fluid was carried out - cancer cells were found. From laboratory examination: CA-125 - 71.0 U / ml.

Indicator	Actual indicator	Reference indicator
CA-125	71,0 U / ml	0-35,0 U / ml

**Tasks:**

1. Preliminary diagnosis?
2. Stage of the disease?
3. Plan of additional methods of examination and determination of the spread of the tumor process?
4. Treatment tactics at this stage of the disease

**7**

A 35-year-old woman complains of discharge from the vagina, which arose after unprotected intercourse in 7th day, slight itching of the external genital organs. These complaints worsen the quality of her life, she needs to use additional hygiene products (daily panty liners or changes twice of underwear during the day).

Objective status: blood pressure - 120/70 mm Hg. Art, temperature - 36.4 ° C, pulse 76 beats per minute, rhythmic, satisfactory qualities.

Gynecological examination: the mucosa of vaginal and cervix is hyperemic, the discharge is penny and green. The size of uterus is normal, in anteflexio position, mobile, painless during palpation. Applications on both sides are unremarkable. The fornixes of the vagina are free. Menarche started at 13 years. Monthly, 4 days after 24, painless, moderate. Last menstruation 3 weeks ago.

Reproductive anamnesis: childbirth 1, abortion - 1 (artificial at 8 weeks). The type of contraception is interruptus coitus. Allergic is absent. The vaginal discharge is taken during the gynecological examination for evaluation the degree of purity and bacterial culture.

Ph-test is 6.4.

Indicator	Actual indicator eference indicator	Reference indicator
Ph- test	6,4	3,8-4,5

#### Questions:

1. Establish a diagnosis?
2. Management ?
3. Differential diagnosis?
4. Treatment and duration?
5. Criteria for removal from dispensary accounting.

## 8

A 40-year-old patient complains of intermenstrual watery discharge with streaks of blood. Anamnesis: she has a bad habit - smoking more than 10 cigarettes a day.

Gynecological anamnesis: childbirth - 2, abortion - 2. She has been using intrauterine contraceptives for more than seven years (at the request of the woman). Menarche from 11 years. Menstruation for 7 days, after 30 days, painful, profuse.

Anamnesis of life: she has diagnosed human papillomavirus (type 16) for about five years. She was treated, using diathermocoagulation.

Gynecological examination: the cervix is dense, bleeds during touching with a spatula of Eyra. The body of the uterus has normal size, in anteflexio position, mobile, painless. The appendages are normal on both sides. The parameterium is free, the vaults are deep.

Specular examination: Schiller's test is positive. During extended colposcopy atypical areas of the mucous membrane of the cervix are revealed in 10<sup>00</sup> and 2<sup>00</sup>. A targeted biopsy is taken from these sites. Biopsy results: stromal invasion and cells of microinvasive squamous oncological process, metaplastic cells.

During additional examination: X-ray of the chest organs, ultrasound of the pelvic organs and abdominal organs, CT scan of the pelvic organs has no signs of regional lymph node involvement, dissemination of the process is absent.

Indicator	Actual indicator	Reference indicator
Erythrocytes	$3,5 \times 10^{12}/l$	$3,7-4,7 \times 10^{12}/l$
Hemoglobin	110 g/l	120-140 g/l
Hematocrit	0,32	0,36-0,42
Platelets	$410 \times 10^{12}/l$	$150-390 \times 10^{12}/l$

Leukocytes	11,0×10 <sup>9</sup> /l	4,0-9,0×10 <sup>9</sup> /l
Lymphocytes	1,2×10 <sup>9</sup> /l	1,2-3,0×10 <sup>9</sup> /l
Monocytes	0,1×10 <sup>9</sup> /l	0,1-0,6×10 <sup>9</sup> /l
SHOE	25 mm/h	2-15 mm/h
Granulocytes	5,4×10 <sup>9</sup> /l	2-5,5×10 <sup>9</sup> /l
June	2%	0%
Chopsticks	2%	1,6%
Segments	74%	52-72%
Eosinophils	5%	2-4%
Basophils	2%	0-1%
Reticulocytes	2%	0-1%

Indicator	Actual indicator	Reference indicator
CA-125 (ovarian tumor marker)	14,5 un/ml	0-35,0 un/ml
HE 4 (ovarian tumor marker)	76 pM	up to 40 years <81,6 pM; 40-69 years <113 pM; >70 years <200 pM
Roma Index (HE4/Ca125)	5,24	premenopause up to 13.1. postmenopausal up to 27.7.

Questions:

1. Establish previous diagnosis.
2. Clinical group?
3. Determine the stage of the tumor process?
4. What additional examination methods should be prescribed?
5. Management of treatment?

## 9

The 45-year-old patient consults with gynecologist with complaints of lower abdominal pain, significant prolonged menstrual disorders and problems with urination. Delivery - 1, abortion - 2. Menstruation from 13 years old, during 3-4 days every 29 days. Blood pressure - 120/70 mm. Pulse - 78 per minute.

Due to speculum examination and colposcopy:

epithelial defect on the cervix with clear edges, inflammatory reaction, edema and dilated capillaries. The epithelium is acetowhite.

Cytology was taken from the cervix. The result is CIN 3.

Bimanual examination:

the uterus is dense, enlarged to 13-14 weeks of pregnancy. Nodes are palpated on the anterior, posterior wall of the uterus, on the rib. The appendages are not palpable. Mucous secretion is visualized.

**Tell about:**

1. Diagnosis
2. The volume of surgery
3. Preoperative examination and preparation for surgery
4. Management of the postoperative period

**10**

Woman of 42 y.o. came to gynecologist with complaints on vaginal bleedings and discharges, pain in the lower abdomen and lower back, sacrum. Bleeding appears after sexual intercourses. Sometimes discharges are liquid, sometimes – ichoric with a bad smell.Periods are regular, last 4 days in every 28 days. 2 deliveries and 1 artificial abortion(G3P2A1).

Patient had many sexual partners during her life.

Speculum examination: uterine cervix is hypertrophic, there is a lesion like “cauliflower”, that bleeds during touching by cotton stick.

PV: uterus is not enlarged, mobile, painless. Appendages are not palpated. Parametrial fat is impacted with infiltrates.

Investigations	Results	Referent ranges
Hb	100 g/l	120-140 g/l
Erythrocytes	$3,3 \times 10^{12}/l$	$3,7-4,7 \times 10^{12}/l$
Leukocytes	$1,1 \times 10^9/l$	$4,0-9,0 \times 10^9/l$
Platelets	$280 \times 10^9/l$	$150-390 \times 10^9/l$
ESR	45 mm/h.	0-20 mm/h.

Protein	35 g/l	60-85 g/l
---------	--------	-----------

Assignments:

1. To establish primary diagnosis.
2. To prescribe additional methods of investigations.
3. To provide with differential diagnosis.
4. Treatment.
5. Side effects of chemo- and radiation therapy.

## 11

Lady L., 46 years old, went to a gynecologist with complaints of persistent itching in the external genitalia.

Objectively - the general condition is satisfactory. The skin is pale pink. The abdomen is soft, painless during the palpation.

Blood pressure - 115/70 mm. Heart rate - 68 / min. SaO<sub>2</sub> - 97.

2 children. Menopause for 2 years.

At gynecological examination - in the area of small labia and clitoris whitish centers with scratches and elements of inflammatory reaction are visualized.

At bimanual examination - a uterus in retroversio-retroflexio. Movable, painless on palpation. Appendages are not palpable.

Tasks:

1. What is the diagnose?
2. Etio-pathogenetic aspects of the disease
3. Additional methods of diagnostics.
4. Differential diagnosis
5. Treatment.

## 12

A mother with a girl of 5 years old went to the doctor with complaints of severe itching and burning in the genitals, thick white discharge in the girl.

From the anamnesis: discharge and itching appeared a week after the end of the course of antibiotic treatment.

Physical and sexual development is age appropriate.

Examination of the external genital organs: the external genital organs are developed correctly, there is a pronounced edema and hyperemia of the vulva, cheesy discharge. Not examined rectally.

Laboratory:

Indicator	Actual indicator	Reference values
HGB-hemoglobin	115/ L	110-140/ L
RBC - erythrocyte	$3,2 \times 10^9 / L$	$3,5-5,5 \times 10^9 / L$
WBC -white blood cells	$3,2 \times 10^9 / L$	$4,5-11,0 \times 10^9 / L$
Stab neutrophils	4%	3-5%
Lymphocytes	25%	25-33%
PLT -platelets	$190 \times 10^9 / L$ ,	$180-320 \times 10^9 / L$
Urea	6,3 $\mu\text{mol} / l$	2,5-8,3 $\mu\text{mol} / l$
Creatinine	55 $\mu\text{mol} / l$	53-106 $\mu\text{mol} / l$
Bilirubin	19,5 $\mu\text{mol} / l$	до 21,0 $\mu\text{mol} / l$
Fibrinogen	3,5/L	3-5/L
CRP	0,5	менше 3
ALAT	20 U/l	до 40 U/l
ASAT	25 U/l	до 40 U/l

### Tasks:

1. Preliminary diagnosis.
2. Establish the risk factors for this pathology

3. Carry out the necessary examinations.

4. Determine the treatment plan and further tactics (indicating the side effects of the drugs)

### 13

A 16-year-old patient was admitted to the gynecological department with complaints of severe bleeding from the genital tract, weakness, dizziness.

From the anamnesis: is registered for chronic tonsillitis. Heredity is not burdened. Menses from 15 years of age, irregular, moderate, painless. She fell ill 8 days ago, when, after a 2-month break, moderate spotting appeared. In the following days, the intensity of bleeding increased, weakness and dizziness appeared.

Objectively: general condition of moderate severity, heart rate - 100 bpm, blood pressure - 95/50 mm Hg. The skin and mucous membranes are pale. No pathology was revealed on the part of the internal organs. Sexual formula - Ma2. 3Ax2P2Mei.

A special examination: the external genital organs are correctly developed, the hair on the pubis is female, the hymen is not disturbed.

Rectal examination - the body of the uterus is not enlarged, dense, mobile, painless. The appendages on both sides are not defined.

Laboratory:

Indicator	Actual indicator	Reference values
HGB-hemoglobin	55 g/l	110-140 g/l
RBC - erythrocyte	$2,7 \times 10^9 / l$	$3,5-5,5 \times 10^9 / l$
WBC -white blood cells	$5,2 \times 10^9 / l$	$4,5-11,0 \times 10^9 / l$
Stab neutrophils	4%	3-5%
Lymphocytes	25%	25-33%
PLT -platelets	$190 \times 10^9 / l$	$180-320 \times 10^9 / l$
Urea	6,3 $\mu\text{mol} / l$	2,5-8,3 $\mu\text{mol} / l$
Creatinine	55 $\mu\text{mol} / l$	53-106 $\mu\text{mol} / l$

Bilirubin	19,5 $\mu\text{mol / l}$	до 21,0 $\mu\text{mol / l}$
Fibrinogen	3,5 g/l	3-5 g/l

**Задания:**

1. Establish a diagnosis
2. With what diseases should you differentiate?
3. Management
4. Recommendations for further management.

**14**

The 26-year-old patient consulted a gynecologist with complaints about the absence of menstruation for 6 months, weight gain, increased hair growth over the upper lip, abdomen, thighs, skin problems in the form of inflammatory rashes on the face and back.

From the anamnesis it is known: menstruation from 15 years, irregular (duration of a menstrual cycle 36-45 days), sparse, painless, last menstruation 6 months ago. Sex life from 21 years. For the last 2 years she has been living a regular sexual life, she did not prevent pregnancy, she did not get pregnant.

**Objectively:** the general condition of the woman is satisfactory, height 1.68 m, weight 85 kg, BMI-30.1 kg / m<sup>2</sup>. The skin is pale pink, glistening on the face, with acne elements, hyperpigmentation is determined in the neck. Arterial pressure- 130/80 mm Hg. Heart rate - 88 / min. respiratory rate - 17 / min. SaO<sub>2</sub> - 97%. The pregnancy test is negative.

**Speculum examination:** vaginal mucosa and cervix without features.

**Bimanual:** uterus in anteversio-anteflexio, slightly reduced in size, normal shape, dense consistency. Appendages on both sides are palpable-enlarged and compacted. The vaults are free.



**According to the result of ultrasound:** myometrium without features, M-echo 13 mm, ovaries enlarged due to multiple follicles (more than 12 in section), located under the thickened teka in the form of a "necklace", in sizes up to 4-6 mm, the volume of the right ovary 11.4 cm<sup>3</sup>, the left -14.1 cm<sup>3</sup>.

Tasks:

1. Formulate a diagnosis.
2. Justify the diagnosis.
3. Offer your plan for examination and management of the patient.
4. With what disease in this patient it is necessary to make a differential diagnosis?
5. Possible immediate and long-term results of the disease.

## 15

Woman, 25 y.o, was admitted to the gynecological department with complaints on severe pain in the lower abdomen with irradiation to shoulder and scapula, fainting. Menarche at 14 years, periods are regular, last 4-5 days in every 29 days. LMP was 1,5 month ago. BP – 90/60 mmHg. Pulse – 110 beats/min.

Physical exam: darkening in the eyes, noise in the ears. Abdomen is bloated, painful during palpation, defans, symptoms of peritoneal irritation are positive in the lower abdomen.

Speculum examination: uterine cervix is normal, external os is closed.

PV: uterus in anteflexion-version position, isn't enlarged, mobile, painless. Palpation of the left appendages is complicated because of defans and painfulness of abdominal wall. Back vault is over hanged, painful, Solovyov's and Promptov's symptoms are positive. Discharges are mucous.

Investigations	Results	Referent ranges
Hb	88 g/l	120-140 g/l
Erythrocytes	$2,6 \times 10^{12}/l$	$3,7-4,7 \times 10^{12}/l$
Leukocytes	$9 \times 10^9/l$	$4,0-9,0 \times 10^9/l$
Hematocrit	24%	36-42%

Platelets	$120 \times 10^9/l$	$150-390 \times 10^9/l$
Загальний білок	35 g/l	60-85 g/l

Assignments:

6. What is the primary diagnosis?
7. Differentiate diagnosis
8. Algorithm of the doctor`s actions
9. Infusion therapy
10. Prophylaxis and diagnostics of another tube`s occlusion.

## 16

A 35-year-old woman went to the doctor with complaints of dull, aching pain in the depths of the pelvis, lower abdomen, lumbosacral region, dyspariuria. Before and during menstruation, the pain intensifies, radiates to the side wall of the pelvis and leg, there are dysuric phenomena, painful tenesmus, bloody discharge from the rectum.

Speculum examination: the cervix is clean, the external os is closed.

Vaginal examination: the uterus is mobile, dense, not enlarged, painless. There is an infiltrate behind the cervix at the level of the inner os, sharply painful, hilly, immobile.

Uterine appendages without features.

Indicator	Actual indicator	Reference values
HGB-hemoglobin	120 g/L	120-140 g/L
WBC -white blood cells	$8.0 \times 10^9/L$	$4.0-9.0 \times 10^9/L$
PLT -platelets	$220 \times 10^9/L$	$150-350 \times 10^9/L$
RBC - erythrocyte	$4,1 \times 10^{12}/L$	$3,7-4,7 \times 10^{12}/L$
Total protein	72 g/l	60-85 g/l
Bilirubin	19,6 $\mu\text{mol} /l$	3,4-20,6 $\mu\text{mol} /l$
Albumin	50 g/l	35-50 g/l
Protein in the urine	absent	absent

Tasks:

1. Preliminary diagnosis

2. Differential diagnosis
3. Additional methods of diagnostics
4. Treatment
5. Complications of therapy

## 17

A 42-year-old patient went to the doctor with complaints of heartburn, itching in the vagina, the presence of discharge. From the anamnesis it is known that the woman had 2 births. There were no abortions or miscarriages. Three weeks ago, she fell ill with COVID-19, complicated by bilateral pneumonia. Received antibiotic therapy for 10 days. The general condition of the woman is satisfactory, Ps 74 /min, arterial blood pressure 135/85 mm Hg. Respiration rate 14 per minute.

The abdomen is soft, painless. At gynecological inspection it is established: the mucous membrane of a vagina at speculum inspection is hyperemic, with a white layer. The neck is formed, the vaginal part is hyperemic. Discharge is in significant quantities, whitish color, cheese-like consistency.

Bimanual examination revealed that the uterus and appendages were without pathological changes. Pseudohyphae and blastospores were detected in vaginal secretions by microscopy.

Blood counts.

Indicator	In patient	Reference values
HGB-hemoglobin	120 g/L	120 - 160 g/L for women
WBC -white blood cells	$3.7 \cdot 10^9/L$	$4-5 \cdot 10^9/L$ for women
HTC -hematocrit	48 %	36 – 46 % for women
PLT -platelets	$330 \cdot 10^9/L$	$180 - 320 \cdot 10^9/L$ for women
NEU - neutrophils	63 %	70 – 74 %
LYM- lymphocytes	15 %	22 – 26 %
EOS - eosinophils	2 %	1,5 – 2 %
Bas - basophils	0.5 %	0,5 – 1 %
Mon - monocytes	19.5 %	3 – 6 %
ESR- erythrocyte	22 mm/h	from 0 до 20 mm in women

sedimentation rate		
D- dimer	0.56 mcg FEU /ml	0.55 mcg FEU /ml
Ferritin	120	10 – 120 in women

Tasks:

1. What is the preliminary diagnosis?
2. What additional research can be used?
3. What is the treatment of this pathology?
4. Criteria of curability.

## 18

A 55-year-old female patient during a routine examination revealed a tumor formation in the left ovary. The woman does not present any complaints.

From the anamnesis: menarche from the age of 12. The menstrual cycle is regular, 4 days after 28 days, painful. Menopause 3 years. Childbirth - 1, abortion - 2. Her grandmother died of breast cancer.

Gynecological examination: the external genital organs are developed correctly, hair growth is female.

Speculum examination: the mucous membrane of the vagina and cervix is clean.

Bimanual examination: the body of the uterus is of normal size, mobile, painless. The enlarged left ovary is palpable (up to 8 cm), mobile, not painful on palpation. Allocation of mucous membranes, moderate.

Ultrasound of the pelvic organs: the uterus is not enlarged. The thickness of the M-echo is 5 mm. A volumetric formation of the left ovary with dimensions of 7x8 cm is determined. Free fluid is determined in the abdominal cavity. No enlarged retroperitoneal lymph nodes were found.

During the laparotomy approach, multiple metastatic foci in the peritoneum were found, the size of the metastases was more than 2 cm. During the operation, a cytological study of the tumor tissue of the ovary — adenocarcinoma — was carried out. A study of ascitic fluid was carried out - cancer cells were found. From laboratory examination: CA-125 - 71.0 U / ml.

Indicator	Actual indicator	Reference indicator
CA-125	71,0 U / ml	0-35,0 U / ml

### Tasks:

1. Preliminary diagnosis?
2. Stage of the disease?
3. Plan of additional methods of examination and determination of the spread of the tumor process?
4. Treatment tactics at this stage of the disease

## 19

A 35-year-old woman complains of discharge from the vagina, which arose after unprotected intercourse in 7th day, slight itching of the external genital organs. These complaints worsen the quality of her life, she needs to use additional hygiene products (daily panty liners or changes twice of underwear during the day).

Objective status: blood pressure - 120/70 mm Hg. Art, temperature - 36.4 ° C, pulse 76 beats per minute, rhythmic, satisfactory qualities.

Gynecological examination: the mucosa of vaginal and cervix is hyperemic, the discharge is penny and green. The size of uterus is normal, in anteflexio position, mobile, painless during palpation. Applications on both sides are unremarkable. The fornixes of the vagina are free. Menarche started at 13 years. Monthly, 4 days after 24, painless, moderate. Last menstruation 3 weeks ago.

Reproductive anamnesis: childbirth 1, abortion - 1 (artificial at 8 weeks). The type of contraception is interruptus coitus. Allergic is absent. The vaginal discharge is taken during the gynecological examination for evaluation the degree of purity and bacterial culture.

Ph-test is 6.4.

Indicator	Actual indicator eference indicator	Reference indicator
Ph- test	6,4	3,8-4,5

Questions:

1. Establish a diagnosis?
2. Management ?
3. Differential diagnosis?
4. Treatment and duration?
5. Criteria for removal from dispensary accounting.

**20**

A 40-year-old patient complains of intermenstrual watery discharge with streaks of blood. Anamnesis: she has a bad habit - smoking more than 10 cigarettes a day.

Gynecological anamnesis: childbirth - 2, abortion - 2. She has been using intrauterine contraceptives for more than seven years (at the request of the woman). Menarche from 11 years. Menstruation for 7 days, after 30 days, painful, profuse.

Anamnesis of life: she has diagnosed human papillomavirus (type 16) for about five years. She was treated, using diathermocoagulation.

Gynecological examination: the cervix is dense, bleeds during touching with a spatula of Eyr. The body of the uterus has normal size, in anteflexio position, mobile, painless. The appendages are normal on both sides. The parametrium is free, the vaults are deep.

Specular examination: Schiller's test is positive. During extended colposcopy atypical areas of the mucous membrane of the cervix are revealed in 10<sup>00</sup> and 2<sup>00</sup>. A targeted biopsy is taken from these sites. Biopsy results: stromal invasion and cells of microinvasive squamous oncological process, metaplastic cells.

During additional examination: X-ray of the chest organs, ultrasound of the pelvic organs and abdominal organs, CT scan of the pelvic organs has no signs of regional lymph node involvement, dissemination of the process is absent.

Indicator	Actual indicator	Reference indicator
Erythrocytes	3,5×10 <sup>12</sup> /l	3,7–4,7×10 <sup>12</sup> /l
Hemoglobin	110 g/l	120–140 g/l
Hematocrit	0,32	0,36-0,42
Platelets	410×10 <sup>12</sup> /l	150-390×10 <sup>12</sup> /л
Leukocytes	11,0×10 <sup>9</sup> /l	4,0-9,0×10 <sup>9</sup> /l
Lymphocytes	1,2×10 <sup>9</sup> /l	1,2-3,0×10 <sup>9</sup> /l
Monocytes	0,1×10 <sup>9</sup> /l	0,1-0,6×10 <sup>9</sup> /l
SHOE	25 mm/h	2-15 mm/h
Granulocytes	5,4×10 <sup>9</sup> /l	2-5,5×10 <sup>9</sup> /l
June	2%	0%

Chopsticks	2%	1,6%
Segments	74%	52-72%
Eosinophils	5%	2-4%
Basophils	2%	0-1%
Reticulocytes	2%	0-1%

Indicator	Actual indicator	Reference indicator
CA-125 (ovarian tumor marker)	14,5 un/ml	0-35,0 un/ml
HE 4 (ovarian tumor marker)	76 pM	up to 40 years <81,6 pM; 40-69 years <113 pM; >70 years <200 pM
Roma Index (HE4/Ca125)	5,24	premenopause up to 13.1. postmenopausal up to 27.7.

Questions:

1. Establish previous diagnosis.
2. Clinical group?
3. Determine the stage of the tumor process?
4. What additional examination methods should be prescribed?
5. Management of treatment?