

ONMU, department of obstetrics and gynecology. Practical class №3_"Diagnostic laparoscopy

MINISTRY OF HEALTH OF UKRAINE
ODESSA NATIONAL MEDICAL UNIVERSITY
International Faculty
Department of Obstetrics and Gynecology



CONFIRMED by

Vice-rector for Scientific and Pedagogical Work

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August 29, 2024

**THE METHODOLOGICAL RECOMMENDATIONS FOR PRACTICAL
CLASS ON THE DISCIPLINE**

International Faculty, course VI

Discipline "Endoscopic technologies in obstetrics and gynecology"

Practical lesson 3. Topic Diagnostic laparoscopy.

Methodological recommendations of practical classes, EPP Medicine, 6 course, international faculty. Educational discipline "Endoscopic technologies in obstetrics and gynecology"

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ONMU, department of obstetrics and gynecology. Practical class №3_"Diagnostic laparoscopy"

Approved:

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

Protocol No1 of August 29, 2024



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Methodological recommendations of practical classes, EPP Medicine, 6 course, international faculty. Educational discipline "Endoscopic technologies in obstetrics and gynecology"

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Practical lesson N3

Topic: "Diagnostic laparoscopy.

Aim: To systematize and deepen knowledge on the topic of practical training. Learn how to assess the state of the patient's pelvic organs. Learn the patient's examination plan before performing diagnostic laparoscopy. To form a clear idea about the examination before the surgical intervention. Learn diagnostic methods used during laparoscopy in gynecology. Get acquainted with the capabilities of modern endoscopic equipment. Master the basic technique of laparoscopic intervention in gynecology. Determine indications and contraindications for operative laparoscopy. To study the main stages of operative laparoscopy. Learn the plan for managing patients in the postoperative period.

Basic concepts: Diagnostic laparoscopy. Indication. Conducting technique, complications. Endoscopic clinical anatomy of the pelvic organs.

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

1. Organizational measures (greetings, checking those present, announcing the topic, the purpose of the lesson, motivating students to study the topic).

The clinical experience of treatment and prevention institutions shows that the most difficult for a doctor are clinical situations that require urgent care. Proper and timely emergency care, rationally planned and carried out with careful methods, can not only save the patient's life, but also preserve her reproductive function.

Laparoscopy is one of the methods of modern surgery, in which (without a large dissection of the abdominal wall), with the help of special optical devices (which are introduced into the abdominal cavity through small incisions in the skin), an examination of the organs of the abdominal cavity is performed. Laparoscopy also refers to modern methods of diagnosing infertility. It is difficult to name any of the pathologies of the pelvic organs, the diagnosis and treatment of which cannot be carried out by laparoscopy.

Laparoscopic gynecology is a new method of effective treatment of various gynecological diseases, which allows shortening the recovery period of patients and leaving no cosmetic defects on the body after surgery. The modern state of technology allows laparoscopy to be used both for diagnostic purposes and for surgical intervention.

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

— **Requirements for students' theoretical readiness to perform practical classes.**

Knowledge requirements:

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- Acquaintance with the capabilities of modern endoscopic equipment in the diagnosis of diseases of the female genital organs
- Mastering the basic technique of endoscopic interventions,
- Determination of indications and contraindications for endoscopic interventions.

List of didactic units:

1. Diagnostic laparoscopy.
2. Indications, technique, complications.
3. Endoscopic clinical anatomy of the pelvic organs.

— Questions (test tasks, problems, clinical situations) to check basic knowledge on the subject of the lesson.

Question:

1. What is laparoscopy.
2. Indications, contraindications, conditions and technical features of diagnostic laparoscopy.
3. Complications that may occur during diagnostic laparoscopy.
4. Assessment of the condition of the pelvic organs during diagnostic laparoscopy.
5. Preparation and postoperative management of gynecological patients during surgery.

Situational tasks:

Task 1. A 26-year-old woman was brought to the hospital with complaints of sudden pain in the lower abdomen radiating to the thigh and rectum, nausea, dizziness, bloody dark discharge from the genital tract for a week, delay of menstruation for 4 weeks. The skin is pale. Symptoms of irritation of the peritoneum are determined in the lower abdomen, more on the right. When examined in mirrors: cyanosis of the mucous membrane of the vagina and cervix. Bimanual examination: the uterus and its appendages are not clearly defined due to sharp pain. The symptom of a "floating uterus" is detected, the posterior vault of the vagina is bulging and sharply painful. HCG test is positive. As a result of the preliminary clinical, laboratory and instrumental examination, a preliminary diagnosis was made: Right-sided broken tubal pregnancy by the type of tubal rupture. Intra-abdominal bleeding.

What volume of surgery is planned to be carried out in the treatment of this patient? Answer standards: 1. Laparoscopy, right-sided tubectomy, sanitation and drainage of the abdominal cavity.

Task 2. D. 26 years old. She was brought to the gynecological department by ambulance on 05/20/22 at 10 a.m. Two hours ago, she was healthy, but suddenly a sharp pain appeared in the abdomen and in the supraclavicular area, vomiting, nausea, loss of consciousness began. The last menstruation was on 05/06/22, its course was normal. Objectively: pale, lethargic, pulse 116 bpm, blood

pressure - 70/40 mm. mercury Art. The abdomen is swollen, breathing does not take part. On palpation, it is sharply painful, especially in the lower areas. At the same time, the tension of the abdominal muscles is noted. The Shttkin-Blumberg symptom is positive. Vaginal: the posterior vault overhangs, the uterus is of normal size, movable, painful, difficult to palpate due to pain, the appendages could not be palpated due to the sharp tension of the abdominal wall. Blood analysis: ESR 10 mm/h, leukocytes $9 \cdot 10^9/l$.

Diagnosis? Management and treatment plan.

Answer standard: Ovarian apoplexy, mixed form. Intra-abdominal bleeding. Anemia. Hemorrhagic shock of the II century. Urgent laparoscopy is necessary. Ovary resection, hemotransfusion, treatment of shock, anemia are performed at the same time.

Test tasks:

1. Patient P., 23 years old, was operated on for endometriosis 6 months ago. She was taking hormone therapy during this time. He has no complaints. Last menstruation 10 days ago. Objectively: the skin has not changed, the pulse is 78 bpm, t - 36.6 C, blood pressure 120/80 mm Hg. Art. Abdomen is somewhat painless. Which examination method is most appropriate for this patient?

- A. Diagnostic laparoscopy.
- B. Ultrasound examination of the pelvic organs.
- C. Hysteroscopy.
- D. Laparotomy.
- E. Clinical and laboratory examination.

2. What indications for diagnostic laparoscopy do you know?

- A. Ectopic pregnancy.
- B. Surgical sterilization.
- C. Ovarian apoplexy.
- D. Rupture of an ovarian cyst.

3. What relative indications for diagnostic laparoscopy do you know?

- A. Diseases of the cardiovascular and respiratory system in the stage of decompensation.
- B. Acute and chronic liver and kidney failure.
- C. Shock and comatose states.
- D. Obesity of the III-IV stage.

Answers: 1 - A; 2 – B; 3 – D.

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

— **Content of tasks (tasks, clinical situations, etc.).**

Interactive task:

Students are divided into 3 teams of 3-4 men each. After the given situational problem, we give the task: The first team is to make a preliminary diagnosis and make a plan for examining the patient. The second team is to draw up a treatment algorithm. The third team evaluates the correctness of the answers of the first and second teams and makes its corrections.

Task 1. A 32-year-old woman was brought to the General Hospital with complaints of sudden pain in the lower abdomen radiating to the thigh and rectum, nausea, dizziness, bloody dark discharge from the genital tract for a week, delayed menstruation for 5 weeks. The skin is pale. Symptoms of irritation of the peritoneum are determined in the lower abdomen, more on the right. In the mirrors: cyanosis of the mucous membrane of the vagina and cervix. Bimanual examination: the uterus and its appendages are not clearly defined due to sharp pain. The symptom of a "floating uterus" is detected, the posterior vault of the vagina is bulging and sharply painful.

1. Previous diagnosis?
2. Examination plan, treatment plan?

Answer 1. Violated ectopic pregnancy by type of fallopian tube rupture. Intra-abdominal bleeding. 2. Ultrasound of the pelvic organs, determination of hCG in blood plasma, detailed blood analysis, general urinalysis, laparoscopy. Operative treatment in emergency order. Tubectomy or tubotomy with enucleation of the fetal egg.

Task 2. An 18-year-old woman was admitted to the hospital with complaints of gradually increasing pain in the lower abdomen for 12 hours, weakness, nausea. From the anamnesis: menstruation from the age of 14 to 3-4/26-28. Last menstruation 2 weeks ago. Sex life during the year. Not pregnant. Prevented pregnancy by interrupted sexual intercourse. Objectively: the skin and mucous membranes are pale, T-36.6o C, BP-95/60 mm Hg. st., pulse - 90 beats/min. The abdomen is tense, painful in the lower parts. Positive symptoms of irritation of the peritoneum in the lower abdomen are determined. In the mirrors: the mucous membrane of the vagina and cervix is bluish.

Bimanual examination: The uterus is slightly enlarged, displacements are painful. The appendages are not clearly contoured due to the sensitivity of the study, the posterior arch is bulging. Discharges from the genital tract are dark-bloody, scanty.

Make an algorithm of the doctor's actions.

Answer standard:

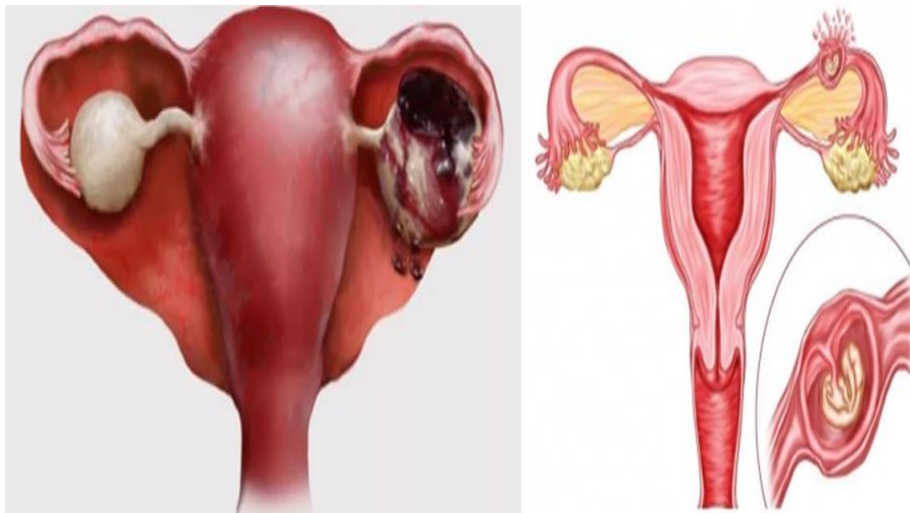
1. Urgent hospitalization in the gynecological department

2. Intensive therapy
3. Therapeutic and diagnostic laparoscopy.

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

Indications for urgent laparoscopy:

1. Ectopic pregnancy.
2. Ovarian apoplexy with intra-abdominal bleeding.
3. Rupture of an ovarian cyst.
4. Torsion of the "leg" of the ovary.
5. Purulent-inflammatory diseases of the pelvic organs (purulent salpingitis, pyovar, pyosalpinx, purulent tuboovarian formations, cyst-uterine and recto-uterine space abscesses).
6. Differential diagnosis of acute surgical and gynecological pathology.
7. Necrosis of subserous myomatous nodes.
8. Diagnosis of complications during or after the procedure



Indications for scheduled laparoscopy:

1. Diagnostic laparoscopy (with biopsy of the affected organ, as indicated).
2. Tube sterilization.
3. Infertility.
4. Benign ovarian tumors.
5. Myoma of the uterus.
6. Anomalies of the development of internal genital organs.
7. Chronic pelvic pain and/or insufficient data from a clinical examination of the small organs pelvis for a final diagnosis (suspected external genital endometriosis, chronic inflammatory process of the uterine appendages, Allen-Masters syndrome).

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8. Monitoring of the effectiveness of treatment of stage III-IV endometriosis. Monitoring the effectiveness of treatment of oncogynecological diseases (in specialized "second look" institutions after combined treatment of ovarian cancer).
9. Selection of access and determination of the scope of surgical intervention for unspecified tumors of the pelvic organs.

Contraindications to laparoscopy:

<i>Absolute:</i>	<i>Relative:</i>
Diseases of the cardiovascular and respiratory system in the stage of decompensation	Obesity of the III-IV stage
Acute and chronic liver and kidney failure Shock and coma states	Severe adhesion process of the organs of the abdominal cavity Large sizes of tumors of the genitals
Peritonitis	Hernia of the anterior abdominal wall and/or diaphragm of large or giant sizes.
	Infectious diseases (flu, sore throat, pneumonia, pyelonephritis, etc.).

Equipment for laparoscopic surgery

Most of the equipment included in the endosurgical complex is mounted on a mobile cart (standing), which has a number of shelves for placing the equipment. The complex usually consists of a standard set of equipment, which includes:

- a) video camera;
- b) video monitor;
- c) light source;
- d) insufflator;
- e) aspiration system - irrigation;
- e) electrosurgical apparatus.

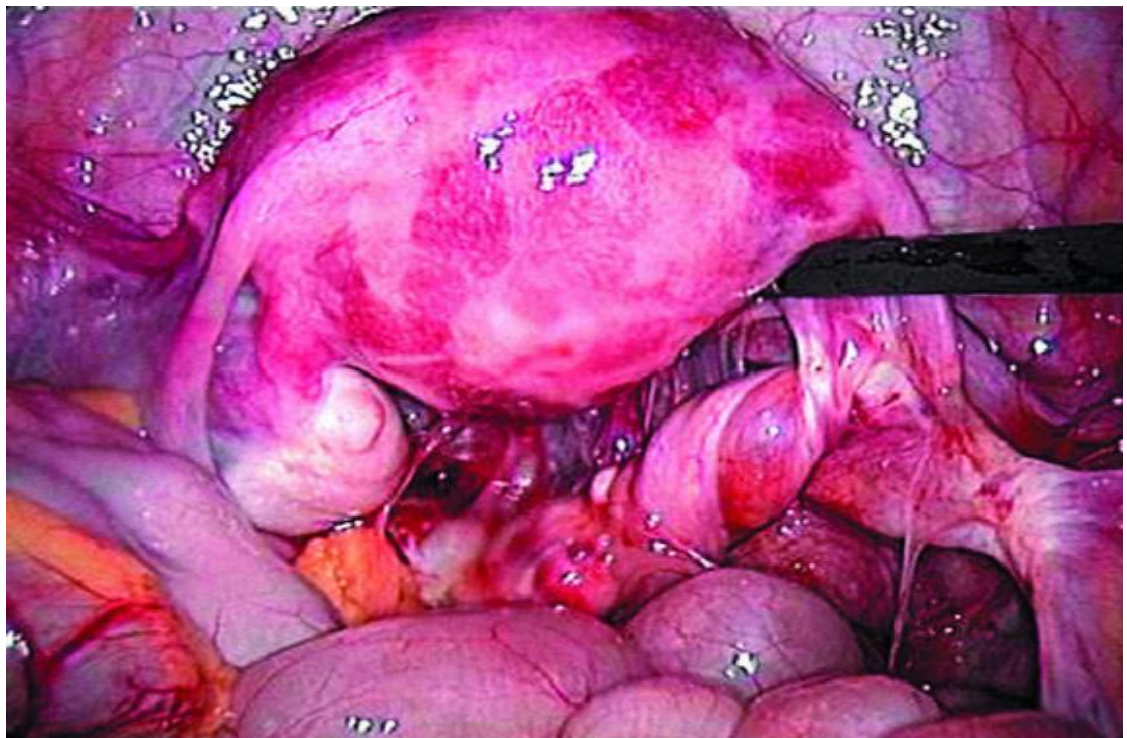
INSTRUMENTS FOR LAPAROSCOPIC SURGERY

Endosurgical instruments can be divided into reusable (metal) and disposable (plastic) instruments. The most accessible and cheap to use are reusable

collapsible metal tools. They are made of stainless steel and alloys.



Manipulators must be used during the examination of the pelvic organs. Research is carried out sequentially, starting with the uterus and preuterine space, then examining the right appendages, retrouterine space and left appendages.



Algorithm for performing practical skills.
Bimanual (vaginal) examination:

- 1) greet the patient;
- 2) identify the patient (name, age);
- 3) inform the patient about the necessity of conducting the study;
- 4) explain to the patient how the study is conducted;
- 5) obtain permission to conduct research;
- 6) wash hands;
- 7) put on inspection gloves;
- 8) spread the labia majora with the first and second fingers of the left (right) hand, place the middle finger of the "dominant" hand at the level of the posterior adhesion, gently press on it to open the entrance to the vagina;
- 9) carefully and slowly insert the middle finger, then the index finger into the vagina along the back wall to the vault and cervix, bring the fourth and fifth fingers to the palm, bring the thumb to the top;
- 10) determine the length of the vaginal part of the cervix in centimeters;
- 11) determine the consistency of the cervix (tight, soft);
- 12) determine the patency of the external os of the cervical canal (closed, a fingertip passes through);
- 13) assess the painfulness of the cervical excursion;
- 14) gently place the second palm on the abdomen (above the symphysis) and moderately press to determine the bottom of the uterine body;
- 15) remove the body of the uterus between two hands and determine:
 - the position of the uterus relative to the cervix (anteflexio, retroflexio);
 - the size of the uterus (normal, reduced, increased);
 - consistency of the body of the uterus (tight-elastic, soft, compacted);
 - mobility of the uterine body (relatively mobile, limited mobility);
 - sensitivity during palpation (painful, painless);
- 16) place the fingers in the bottom of the left lateral vault and, using both hands, palpate the left vaginal vault and the left appendages of the uterus, determine their size, mobility and painfulness;
- 17) determine the capacity of the vaginal vaults;
- 18) inform the patient about the results of the study;
- 19) thank the patient;
- 20) remove inspection gloves;
- 21) wash your hands.

Laparoscopy is performed according to the classical method, which includes the following main stages:

- operation field processing - placement of a uterine cannula
- application of pneumoperitoneum

- introduction of the first trocar and the beginning of the examination of the organs of the abdominal cavity (diagnostic stage of laparoscopy)
- introduction of additional trocars for manipulators
- in-depth revision of abdominal organs
- operative stage of laparoscopy
- the final stage of laparoscopy
- removal of the macropreparation, washing abdominal cavity, control of hemostasis, removal of gas and instruments
- application of single stitches or braces in places of punctures on the skin.

When performing laparoscopy, follow the general rules of operative manipulations. To control hemostasis during laparoscopic interventions, the same techniques are used as in open surgery: electrocoagulation of blood vessels, their clipping, stitching and application of nodal sutures, stitching with the help of stapling devices. In most cases, the creation of a pneumoperitoneum is performed in a closed manner with the help of a Veresh needle, which is inserted into the abdominal cavity just below the umbilical ring. The trocar is inserted through the skin incision, with moderate pressure, at an angle of 90° to the peritoneum and at this moment is turned upward in one movement by 45°. After the introduction of the main trocar, the stylet is removed and a laparoscope is inserted into the abdominal cavity. The patient is transferred to the Trendelenburg position and the abdominal cavity is examined, including the upper floor.

Open laparoscopy consists of the following stages: 1) mini-laparotomy, 2) introduction of a special trocar through the mini-laparotomy opening into the abdominal cavity, 3) fixation of the trocar sleeve to the anterior abdominal wall for its sealing, 4) creation of pneumoperitoneum through the trocar sleeve.

Laparoscopic tubectomy: Operation technique: a pneumoperitoneum is typically created. Additional trocars are introduced in the iliac-inguinal regions. After tension with forceps, the fallopian tube is clamped with the branches of the dissector and a bipolar current is applied to it in the coagulation mode. At the same time, the fallopian tube is cut along the upper edge of the mesosalpinx with simultaneous hemostasis. The fallopian tube is pulled out of the abdominal cavity with a soft clamp through the extended contraperture to the left or right. Then the abdominal cavity and small pelvis are cleaned with an isotonic solution of sodium chloride, and cosmetic sutures are placed on the skin.

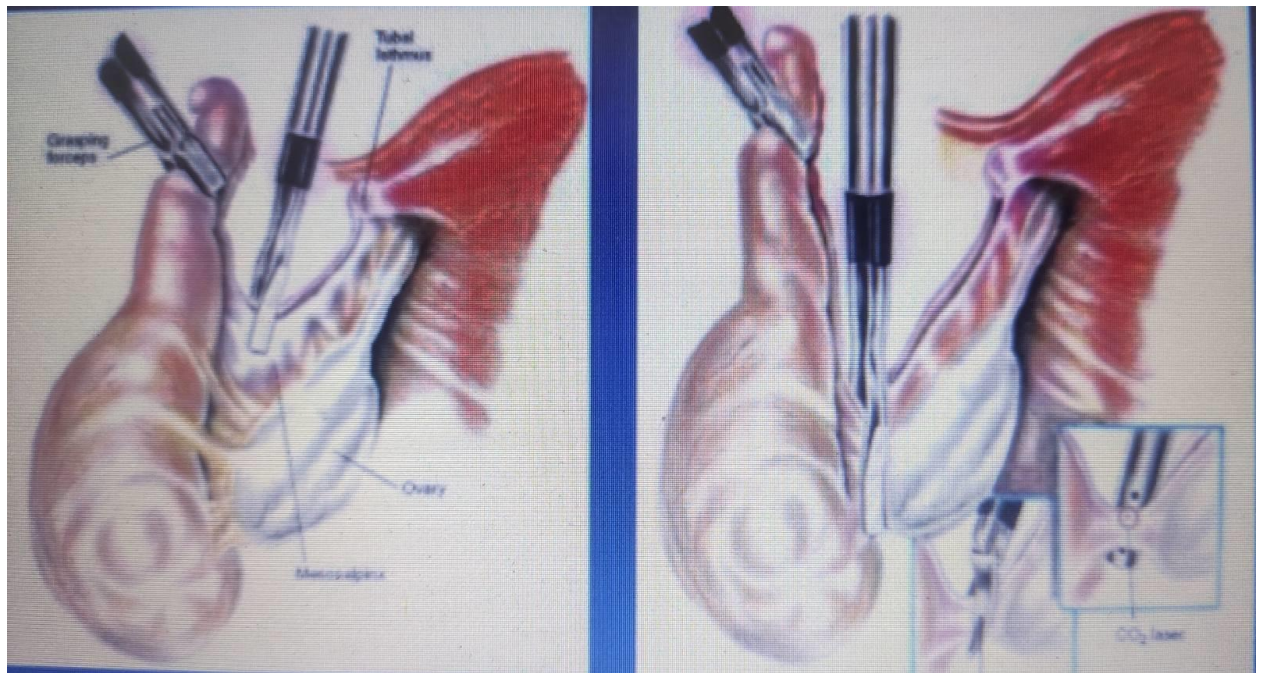


Image1. Laparoscopic tubectomy. Stages of the operation.

3.3. Requirements for work results, including to registration

1. Collect the patient's medical history correctly.
2. Identify complaints that characterize the basis of the disease.
3. Determine, based on the anamnesis of the disease, the data of subjective and objective research, the signs and features necessary to identify the causes that led to the "acute" abdomen in gynecology.
4. Correctly interpret the data of laboratory and instrumental research methods.
5. Make a plan for the examination of a patient with ovarian apoplexy.
6. Make a plan for the examination of a patient with an ectopic pregnancy.
7. Carry out a differential diagnosis of an "acute" abdomen.
8. Establish a diagnosis and make a treatment plan for a patient with ovarian apoplexy.
9. Establish a diagnosis and make a treatment plan for a patient with an ectopic pregnancy.
10. To be able to prepare the patient and postoperative management of gynecological patients during urgent surgical interventions.
11. To provide recommendations on the choice of the method of surgical treatment and the volume of surgical intervention in patients with ovarian apoplexy.
12. Provide recommendations on the choice of surgical treatment method and the scope of surgical intervention in patients with tubal ectopic pregnancy.
13. Analysis and discussion of the results of the patient's examination.

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

Situational tasks:

Task 1 Patient B., 21 years old, came to the gynecological department with complaints of sharp pain in the lower abdomen radiating to the anus, dizziness that appeared suddenly after coitus. At home there was a short-term loss of consciousness. Medical history: menstruation since the age of 13, established after 2 years, 7 days each, cycle 28–34 days, painless, moderate, irregular. Last menstruation 2 weeks ago. Objective examination: general condition of the patient of moderate severity. The skin and visible mucous membranes are pale. The tongue is clean, moist. Body temperature is 37.1 °C. Pulse - 84 beats/min, rhythmic, blood pressure - 100/65 mm Hg. Art. The abdomen is moderately distended, moderately painful on palpation in the hypogastric region. Symptoms of peritoneal irritation are positive. Abdominal percussion - dulling of the sound. Pasternacki's symptom is negative on both sides. Physiological parameters are normal. Gynecological examination. The cervix is not changed. The outer eye is closed. Bimanual examination: excursions of the cervix are sharply painful, Promptov's symptom is positive. The body of the uterus is in the anteflexio position, not enlarged, dense, sensitive to palpation, mobile. In the area of the right appendages of the uterus, a tugoelastic mass measuring 5*6*5 cm is palpable, sharply painful, sharply painful. The left uterine appendages are not palpable. The posterior vault of the vagina overhangs and is sharply painful upon palpation. Discharge from the genital tract is bloody, scanty. General blood analysis: hemoglobin – 94 g/l, erythrocytes – $2.9 \cdot 10^{12}/l$, leukocytes – $5.4 \cdot 10^{12}/l$.

Make a diagnosis. Additional examination methods? План лікування?

Standards of answers. Apoplexy of the right ovary, hemorrhagic form. Intra-abdominal bleeding. Hemorrhagic shock of the 1st degree. Anemia I st.

2. Examination plan: general clinical and biochemical laboratory tests (general blood test, general urinalysis, blood group and Rhesus factor, biochemical blood test, coagulogram), electrocardiogram; Ultrasound of the pelvic organs; express test with urine for hCG, laparoscopy 3. Treatment tactics depend on the general condition of the patient, the volume of intra-abdominal bleeding, hemodynamic indicators. The scope of surgery for this woman is laparoscopy, resection of the left ovary. Sanitation and drainage of the abdominal cavity.

Task 2. A 13-year-old girl complains of spasm-like pain in the lower abdomen, which appeared suddenly during physical education, nausea, vomiting. From the anamnesis: menstruation since the age of 12, not established, abundant, painful. As a child, she suffered from childhood infections. Denies gynecological diseases. Objectively: the skin and mucous membranes are pink. Pulse - 82 beats per minute, blood pressure - 100/60 mm Hg. Body temperature - 38°C. When palpating the abdomen, the Stotkin-Blumberg symptom is positive in the right iliac

region. Virgo! Gastrointestinal-rectal examination is impossible due to its sharp pain.

What studies are most informative for making a diagnosis?

Reply 1. Ultrasound of the pelvic organs. 2. Laparoscopy of the pelvis and abdominal cavity. 3. Computed tomography of the pelvic organs.

Task 3. A 34-year-old patient came to the hospital with complaints of acute pain in the lower abdomen, nausea, vomiting. 6 months ago, during the examination, the gynecologist suspected the presence of a right ovarian cyst, but the patient refused the examination. Last menstruation 3 weeks ago, on time. She considers herself sick for 2 weeks, when cramp-like pain in the lower abdomen first appeared. There was no dizziness, she did not consult a doctor. From the anamnesis: she was treated for inflammation of the uterine appendages. Objectively: general condition of moderate severity. Temperature 37.7°C, pulse 86 bpm. AT-130/90mm Hg. Art. The tongue is coated, the abdomen is moderately distended, the Shchotkin-Blumberg symptom is positive in the lower abdomen. Bimanual examination: attention is drawn to sharp pain when the cervix is displaced. To the right of the uterus, a 4x5 cm, painful, elastic mass can be palpated. On the left, applications are not defined. Vaults are deep, palpation of the right vault is painful. Vaginal discharge - white, moderate. Preliminary diagnosis: Torsion of the pedicle of the tumor of the right ovary. What volume of surgery should be performed in the treatment of the patient?

Answer standard: In this clinical case, treatment should begin with laparoscopy. The scope of the operation depends on the state of the applications and structures involved in the twist. Detorsion is performed and the state of applications after detorsion is evaluated. In the absence of signs of necrosis and the appearance of positive nutritional characteristics: pink color of the mucous membrane, moisture of the mucous membrane, pulsation of blood vessels - at this stage, the surgical intervention is completed. If signs of necrosis appear - adnexectomy. If the omentum or loops of intestines are twisted, their viability and further tactics are evaluated. In the case of necrosis - resection of the omentum, resection of the intestine with anastomosis.

Test tasks STEP-2: 1. (step 2018) A woman was delivered by ambulance with cramp-like pain in the right iliac region that arose after a delay in menstruation, radiating into the rectum. bloody discharge from the genital tract. Objectively: heart rate - 100/min., blood pressure - 90/60 mm Hg. The skin is pale. The abdomen is painful on palpation, a positive symptom of Shtokkin-Blumberg. During a gynecological examination, cervical dislocations are painful, the right appendages are enlarged, painful, the posterior vault overhangs, the discharge is bloody. Make a preliminary diagnosis:

- A. Acute right-sided adnexitis
- B. Appendicitis

- C. Abortion in progress
- D. Apoplexy of the right ovary
- E. Interrupted ectopic pregnancy

2) A woman complains of a sudden pain in the lower abdomen radiating to the anus, nausea, dizziness, bloody dark secretions from the genital tract for a week, delay of menstruation for 4 weeks. Symptoms of peritoneal irritation are positive. In the mirrors: blueness of the mucous membrane of the vagina and cervix. During bimanual examination, the symptom of "floating uterus", protrusion and soreness of the back and right lateral arches of the vagina is noted. The most likely diagnosis?

- A. Acute appendicitis.
- B. Ovarian apoplexy.
- C. Acute right-sided adnexitis.
- D. Twist the legs of the ovarian tumor.
- E. Violated ectopic pregnancy.

3) The woman is bothered by acute pain in the abdomen, an increase in body temperature up to 38.0°C. She known about the presence of uterine fibroids for 3 years. Symptoms of peritoneal irritation are positive in the lower abdomen. Leukocytes 10.2 T/l, ESR 28 mm/h. During bimanual examination, the body of the uterus is enlarged up to 8-9 weeks of pregnancy, on the front surface there is a sharply painful myomatous node measuring 4x4 cm, the appendages of the uterus have not changed. Ultrasound examination confirms the presence of a subserosal myomatous node. What is the most likely diagnosis?

- A. Internal endometriosis.
- B. Tuboovarian tumor.
- C. Necrosis of myomatous node.
- D. Acute adnexitis.
- E. Perimetritis.

4) A 20-year-old patient came to the gynecology department with complaints of sharp pain in the lower abdomen after physical exertion. Last menstruation 2 weeks ago. During vaginal examination, the uterus is not enlarged, painless, the appendages on the left side are sharply painful during palpation, which complicates the examination. Promtov's symptom is positive. The back arch overhangs, painful. Pulse 96 bpm, blood pressure 100/60 mm Hg. What pathology are we talking about?

- A. Acute left-sided salpingo-oophoritis.
- B. Apoplexy of the left ovary.
- C. Pyosalpinx on the left.
- D. Disrupted left-sided tubal pregnancy.
- E. Tumor of the left ovary

5) (2019) A 39-year-old patient with complaints of acute pain in the lower abdomen, vomiting, accelerated urination. On examination: the abdomen is

moderately distended, a positive symptom of Shtotkin-Blumberg. Pulse 88 per minute, body temperature 37°C. During bimanual examination: the body of the uterus is dense, not enlarged, mobile, painless, to the right and in front of the uterus, a mass of 6x6 cm in size is palpable, with a tight-elastic consistency, sharply painful when shifted; appendages are not defined on the left; the vaults are free; mucous discharge. An additional research method?

- A. X-ray television hysterosalpingography.
- B. Excretory urography.
- C. Transvaginal ultrasound.
- D. Puncture of the abdominal cavity through the posterior vault of the vagina.
- E. Computed tomography

4. Summing up (criteria for evaluating learning outcomes). On-going control: oral survey, testing, assessment of performance of practical skills, solution of situational clinical tasks, assessment of activity in class, etc.

The structure of the current assessment in the practical session:

1. Evaluation of theoretical knowledge on the subject of the lesson: - methods: survey, solving a situational clinical problem; - maximum score – 5, minimum score – 3, unsatisfactory score – 2.
2. Evaluation of practical skills and manipulations on the subject of the lesson: - methods: assessment of correct performance of practical skills; - maximum score – 5, minimum score – 3, unsatisfactory score
3. Evaluation of work with the patient on the subject of the lesson: - methods: assessment of:
 - a) communication skills of communicating with the patient,
 - b) the correctness of prescribing and evaluating laboratory and instrumental studies,
 - c) compliance with the differential diagnosis algorithm,
 - d) substantiation of the clinical diagnosis,
 - e) drawing up a treatment plan;

the maximum score is 5, the minimum score is 3, the unsatisfactory score is 2.

Current assessment criteria for practical training:

«5»	The student is fluent in the material, takes an active part in discussing and solving a situational clinical problem, confidently demonstrates practical skills during the examination of a patient and the interpretation of clinical, laboratory and instrumental research data, expresses his opinion on the subject of the lesson, demonstrates clinical thinking.
«4»	The student has a good command of the material, participates in the discussion and solution of the situational clinical problem, demonstrates

	practical skills during the examination of the patient and the interpretation of clinical, laboratory and instrumental research data with some errors, expresses his opinion on the topic of the lesson, demonstrates clinical thinking.
«3»	The student does not have sufficient knowledge of the material, is unsure of participating in the discussion and solution of the situational clinical problem, demonstrates practical skills during the examination of the patient and the interpretation of clinical, laboratory and instrumental research data with significant errors.
«2»	The student does not master the material, does not take part in the discussion and solution of the situational clinical problem, does not demonstrate practical skills during the examination of the patient and the interpretation of clinical, laboratory and instrumental research data.

5. List of recommended literature (main, additional, electronic

Basic:

1. Obstetrics: student's book = Акушерство: підручник / Gladchuk I.Z., Ancheva I.A. Vinnytsia: Nova Knyga, 2021. –288 p.
2. Obstetrics and Gynecology: in 2 vol.:textbook. Volume 2. Gynecology / V.I. Gryshchenko, M.O. Shcherbina, B.M. Ventskiivskyi et al.; edited by V.I. Gryshchenko, M.O. Shcherbina. — 3th edition. – K.: AUS Medicine Publishing, 2022 – 352 p.
3. Oats, Jeremy Fundamentals of Obstetrics and Gynaecology [Text]: Llewellyn-Jones Fundamentals of Obstetrics and Gynaecology / J. Oats, S. Abraham. – 10th ed. – Edinburgh [etc.]: Elsevier, 2017. – VII, 375 p.
4. Llewellyn-Jones Fundamentals of Obstetrics and Gynaecology (10th Ed). Jeremy Oats, Suzanne Abraham. Elsevier. 2016. – 384 pp.
5. Dutta, Durlav Chandra. D. C. Dutta's Textbook of Gynecology including Contraception / D.C. Dutta; ed/ Hiralal Konar. – 7th.ed. – New Delhi: Jaypee Brothers Medical Publishers, 2016. – XX, 574 p.

Additionally:

1. 2011 IFCPC Colposcopic Terminology. Clarification on practical use.- K.. - "Polygraph Plus", 2018.- 62 p.
2. Modern technical teaching aids (see appendix to the work program of the 4th year) Prevention of purulent-septic complications during laparoscopic surgeries on pelvic organs with the risk of vaginal microbiota contamination / Zaporozhan VN, Gladchuk IZ, Rozhkovska NM, Volyanska AG, Shevchenko OI //World of Medicine and Biology.-2020- #1(71). - P.49- 53. (Web of science)

13. Electronic information resources

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