

ONMedU, Department of Obstetrics and Gynecology. Practical lesson No. 6. Operative laparoscopy for benign tumors of the female genital organs

---

MINISTRY OF HEALTH OF UKRAINE

ODESSA NATIONAL MEDICAL UNIVERSITY

Faculty international

Department of Obstetrics and Gynecology



**CONFIRMED by**

Vice-rector for scientific and pedagogical work

Eduard BURIACHKIVSKYI

August 29, 2024

**METHODOLOGICAL RECOMMENDATIONS FOR PRACTICAL CLASS**  
**from elective discipline**

Faculty international, 6th course

Elective discipline " **ENDOSCOPIC TECHNOLOGIES IN OBSTETRICS AND GYNECOLOGY** "

**Practical lesson No. 6 . "Operative laparoscopy for benign tumors of the female genital organs".**

---

Methodological recommendations for practical lesson, EPP "Medicine", 6th course, Faculty international. Elective discipline "Endoscopic technologies in obstetrics and gynecology".

ONMedU , Department of Obstetrics and Gynecology. Practical lesson No. 7. Operative laparoscopy for benign tumors of the female genital organs

ONMedU , Department of Obstetrics and Gynecology. Practical lesson No. 6. Operative laparoscopy for benign tumors of the female genital organs

**Approved:**

Meeting of the Department of Obstetrics and Gynecology  
of Odesa national medical university

Protocol No. 1 dated August 29, 2024

Head of the department \_\_\_\_\_ (Ihor HLADCHUK)

**Developer:**

Ph.D., Associate Professor of obstetrics  
and gynecology department \_\_\_\_\_ Bykova N.A.

Ph.D., Associate Professor of obstetrics  
and gynecology department \_\_\_\_\_ Stepanovichus O.M.

Methodological recommendations of a practical lesson, EPP "Medicine", 6th course, Faculty international. Elective discipline "Endoscopic technologies in obstetrics and gynecology"

Methodological recommendations of a practical lesson, EPP "Medicine", 6th course, Faculty international. Elective discipline "Endoscopic technologies in obstetrics and gynecology"

*Practical lesson No. 6*

**Topic:** " Operative laparoscopy for benign tumors of the female genital organs."

**Aim:** Students need to learn the main etiological and pathogenetic factors of tumor diseases of the female genital organs. Learn how to plan a comprehensive examination of patients with benign tumors of the female genital organs. To learn to analyze the data of laboratory and instrumental methods of examination of patients with benign processes of the genitals , to choose the correct tactics for managing the data of patients. Know the types and main stages of operative laparoscopic interventions and be able to determine the volume of surgical intervention in the treatment of patients with benign tumors of the female genital organs.

**Basic concepts:** Tumors and tumor -like formations of uterine appendages. Ovariectomy . Resection of the ovary. Tubectomy . Adnexectomy . Myoma of the uterus. Conservative myomectomy . Hysterectomy . The main stages of the operation. Performance technique. Preoperative preparation and management of the postoperative period.

**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).**

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. Laparoscopic surgery allows for safe, accurate and effective treatment. At the same time, the rehabilitation period and the risk of complications characteristic of traditional cavity surgery are significantly reduced.

The modern state of technology allows laparoscopy to be used both for diagnostic purposes (diagnostic laparoscopy ) and for surgical intervention (operative laparoscopy ) or to be combined ( diagnostic and therapeutic laparoscopy ) .

Laparoscopy is a minimally invasive operative method of treatment and diagnosis of pelvic organs. The intervention is performed without dissection of the anterior abdominal wall through small punctures.

Operative laparoscopy makes it possible to diagnose and treat infertility, endometriosis , tumor -like formations of uterine appendages, uterine fibroids, ectopic pregnancy, etc. The use of laparoscopy in gynecology has opened a new effective stage in the treatment of benign ovarian tumors - it allows organ - preserving operations (ovarian resection, ovarian cyst (tumor) enucleation) with

minimal traumatization of the tissue and follicular apparatus of the ovary, which allows to preserve the ovarian reserve as much as possible.

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

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

**Knowledge requirements:**

- communication skills and clinical examination of the patient.
- the ability to evaluate information about the diagnosis using a standard procedure, based on the results of laboratory and instrumental studies.
- the ability to determine the list of necessary clinical and laboratory and instrumental studies and the evaluation of their results.
- the ability to identify the leading clinical symptom or syndrome: amenorrhea, anemic syndrome, abdominal pain, pallor, hemorrhagic syndrome, dysmenorrhea , uterine bleeding.
- the ability to establish a preliminary diagnosis, carry out differential diagnosis and determine the clinical diagnosis of the disease: abnormal uterine bleeding, benign and precancerous neoplasms of the female genital organs.
- the ability to maintain medical documentation according to standard requirements (medical history of a gynecological patient) in the conditions of a health care institution or its unit.

**List of didactic units:**

- Tumors and tumor -like formations of uterine appendages.
- Ovariectomy .
- Resection ovary \_
- Tubectomy .
- Adnexectomy .
- Myoma of the uterus.
- Conservative myomectomy .
- Hysterectomy .
- The main ones stages operations .
- Machinery performance \_
- Preoperative preparation and management postoperative period \_

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

**Question:**

1. Therapeutic and diagnostic endoscopic methods of treatment in gynecology.
2. Laparoscopy. Indications and conditions for diagnosis and treatment of benign pathologies of the female genital organs, technique, complications.

3. Contraindications and complications laparoscopic operations on women genitals .

4. Tumors and tumor -like formations of uterine appendages. Types of operative interventions on the appendages of the uterus.

5. Ovariectomy . The main stages of the operation. Performance technique.

6. Resection of the ovary. The main stages of the operation. Performance technique.

7. Tubectomy . The main stages of the operation. Performance technique.

8. Adnexectomy . The main stages of the operation. Performance technique.

9. Myoma of the uterus. Diagnostic methods and types of surgical interventions in the treatment of benign uterine pathology.

10. Conservative myomectomy . The main stages of the operation. Performance technique.

11. Hysterectomy . The main stages of the operation. Performance technique. Preoperative preparation and management of the postoperative period.

### **Typical situational tasks :**

#### **Task 1.**

A 40-year-old woman consulted a gynecologist. Complaints of periodic pain in the lower abdomen, accelerated urination. Menstruation from the age of 13, for 5 days, after 28 days, painless, regular, moderate. Last menstruation 3 weeks ago. There were 2 pregnancies, 2 deliveries, 0 abortions. Bimanual examination revealed: the body of the uterus is of normal size, dense, bumpy, a dense round formation on the leg up to 5 cm can be palpated along the front wall, painless. The appendages of the uterus on both sides are not enlarged, painless. Secretions from the genital tract are mucous, moderate. According to ultrasound, it is a subserous uterine myoma. What method of treatment should be offered to a woman?

**Answer standard:** Laparoscopy. Conservative myomectomy .

#### **Task 2.**

A 34-year-old woman turned to a doctor with complaints of periodic pulling pain in the lower abdomen, more on the left side. It is known from the anamnesis that the woman last consulted a gynecologist 2 years ago, when a tumor of the left ovary was diagnosed . Surgical treatment was offered, which the patient refused. Menstruation from the age of 12, moderate, every 5-6 days, after 30 days, painless. 2 pregnancies, 1 childbirth, 1 abortion.

During a gynecological examination in mirrors: the cervix is cylindrical in shape, the uterine cavity is slit -shaped . Bimanual examination: the body of the uterus is not enlarged, painless, dense, mobile. The appendages on the left are palpable a tumor -like formation 6 cm in diameter, sensitive to palpation, mobile.

Applications on the right without features. Secretions from the genital tract are mucous.

During the follow-up examination, a preliminary diagnosis was established: Tumor of the left ovary. The results of additional laboratory and instrumental research methods indicated a benign course of the process. What method of treatment would you suggest to a woman?

**Answer standard:** Surgical treatment in volume - Laparoscopy. Enucleation of the tumor of the left ovary.

**Typical test tasks:**

1. Adnexectomy is:

- a) removal of the fallopian tube;
- b) removal of the ovary;
- c) removal of the uterus;
- d) removal of the ovary and fallopian tube;
- e) removal of the cervix.

2. Endoscopic methods include:

- a) colpocytology .
- b ) metrosalpingography .
- c) laparoscopy .
- d) hysteroscopy .
- e) probing uterine cavity .

3. In a 28-year-old woman, a bimanual examination revealed: the body of the uterus of normal size, on the front wall - a dense rounded formation on the leg, connected to the uterus, up to 5 cm in diameter, painless, appendages without features. With the help of ultrasound, the diagnosis of subserous uterine myoma was confirmed. What method of treatment should be offered?

- A. Laparoscopy , myomectomy
- B. Laparoscopic assistance of vaginal hysterectomy
- B. Laparoscopy , supracervical hysterectomy
- G. Vaginal hysterectomy
- D. Laparotomy , myomectomy .

**Correct answers :** 1 – D, 2 – B, 3 – A.

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

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

**Interactive task:**

The students of the group are divided into 3 subgroups of 4-5 people each. We give the task:

And the subgroup - to make a preliminary diagnosis.

Subgroup II – to draw up a management plan for a gynecological patient.

Subgroup III – evaluates the correctness of the answer of subgroups I and II and makes its corrections.

**Unusual situational tasks:**

**Task 1.**

Patient O, 45 years old, consulted a gynecologist about profuse menstruation, turning into abnormal uterine bleeding, pulling pain in the lower abdomen for the past 2 years. It is known from the anamnesis that the woman is on the dispensary register with a gynecologist for uterine fibroids. Menstruation since the age of 13, abundant, painless, irregular for the last 2 years. Last menstruation 10 days ago. 3 pregnancies, 1 childbirth, 2 medaborts . Bimanual examination revealed: the body of the uterus is irregularly shaped, enlarged up to 10 weeks of pregnancy, dense, bumpy due to multiple nodes, mobile. The appendages of the uterus on both sides are not enlarged, painless. Mucous discharge from the genital tract. According to ultrasound, it is multiple myoma of the uterus.

ZAC – hemoglobin 92 g/l, erythrocytes –  $3.2 \times 10^{12}/l$ .

Install the previous one. Determine further tactics of examination and treatment.

**Answer standard:** Multiple myoma of the uterus. KHAMK Mild anemia. necessary to conduct an additional biopsy of the endometrium .

Treatment: surgical laparoscopy , hysterectomy without appendices.

**Task 2.**

to the gynecologist with complaints of pulling pain in the lower abdomen, more on the right. Menopause is 12 years old. Pregnancies - 4, 2 deliveries, 2 medaborts . During the examination, a tumor of the right ovary was diagnosed. Oncomarkers CA-125, HE4, the ROMA index are within normal limits. FGS, colonoscopy , mammography - without pathology. In the biopsy endometrium - endometrium is atrophic. The patient was offered surgical treatment. Determine the volume of surgical intervention:

**Answer standard:** Laparoscopy. Right-sided adnexectomy .

**Unusual test tasks:**

1. With single subserous nodes on the leg are mainly:

- a) conservative treatment of COC, observation;
- b) node removal by laparoscopic access using bipolar electric energy;
- c) laparoscopic access with double-row vicryl sutures;
- d) laparotomic access with double-row vicryl sutures;
- e) laparotomy access with the imposition of a single-row vicryl suture.

2. Myomectomy with interstitial location of nodes

preferably perform:

- a) laparoscopic access using bipolar bed coagulation;
- b) laparoscopic access with the application of tantalum staples;

- c) laparoscopic access with the imposition of a single-row vicryl suture;
- d) laparotomic access with double-row vicryl sutures;
- e) laparotomy access with the imposition of a single-row vicryl suture.

**3.** The choice of surgical access depends on:

- a) the size of the uterus;
- b) localization of myomatous nodes;
- c) preoperative hormonal preparation;
- d) equipping with endoscopic equipment and experience of the surgeon;
- e) all answers are correct.

**4.** For benign tumors of the ovaries, the following is not performed:

- a) salpingolysis .
- b) ovariectomy .
- c) resection of the ovary.
- d) tumor excision.
- e) adnexectomy .

5. A 40-year-old woman came to the women's consultation with complaints of irregular menstrual cycle in the form of abnormal uterine bleeding for six months, pulling pains in the lower abdomen, weakness. During the gynecological examination, it was found: the body of the uterus was enlarged up to 12 weeks of pregnancy, dense, mobile, painless. In the blood: Hb - 90 g/l. What kind of research must be done before choosing treatment tactics?

- A) Hysteroscopy with biopsy of the endometrium .
- B) Culdoscopy
- ) Metrosalpingography
- D) MRI of the pituitary gland
- D) Fibrogastroscopy .

**Correct answers:** 1 – B, 2 – B, 3 – D, 4 – A, 5 – A.

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

### **Classification of uterine fibroids ( FIGO , 2011)**



	Суб-мукозная	0	Узел на ножке полностью в полости матки
	Другие	1	<50% узла расположено интрамурально
		2	≥50% узла расположено интрамурально
		3	100% интрамурально, но контактирует с эндометрием
		4	Интрамуральный узел
		5	Субсерозный ≥50% интрамуральный
		6	Субсерозный <50% интрамуральный
		7	Субсерозный на ножке
		8	Другие (например, шейный узел, паразитарные образования и др.).
Гибридная лейомиома (включает эндометрий и серозную оболочку)	В этом случае две цифры указываются через дефис. При этом первая цифра соответствует отношению узла к эндометрию, вторая — отношению узла к серозной оболочке.		
	2—5	Узел расположен субмукозно и субсерозно. Субмукозно выступает менее половины диаметра узла и субсерозно выступает менее половины диаметра узла.	

***Preoperative examination and preparation*** are carried out according to standard principles according to the order of the Ministry of Health of Ukraine No. 620 dated 12.29.2003.

***Standard examination gynecological patients for planned endosurgery intervention ( in accordance with the order of the Ministry of Health of Ukraine No. 620 dated 12.29.2003)***

1. General physical examination
2. Definition groups blood and Rh factor
3. Analysis blood for RV, HIV, Hbs -a/g
4. General analysis blood and urine
5. Sugar of blood
6. Bacteriological analysis secretions from sexual ways (urethra, cervical canal, vagina )
7. Biochemical analysis blood ( general protein , creatinine , bilirubin , liver samples )
8. Coagulogram
9. Oncocytological research smears from the cervix and cervical canal or the result of histopathological examination research
10. Electrocardiogram
11. FG or radiography bodies chest cells
12. Review of the therapist
13. Review profile specialists according to indications
14. Ultrasonic research pelvic organs
15. Colposcopy

***Standard examination gynecological patients before urgent surgical intervention ( in accordance with the order of the Ministry of Health of Ukraine No. 620 dated 12.29.2003)***

1. General physical examination

Methodological recommendations of a practical lesson, EPP "Medicine", 6th course, Faculty international. Elective discipline "Endoscopic technologies in obstetrics and gynecology"

2. Group blood and Rh factor

**Antibiotic prophylaxis** conduct during induction of anesthesia by intravenous drip antibiotics . According to the testimony conduct repeated introduction antibiotics in the postoperative period period after 6-12 hours, and with infected people antibiotic therapy is carried out during operations .

**Conducting algorithm laparoscopy**

Laparoscopy conducted in the classical way methodology , which includes the following the main ones stages :

- processing operating field
- imposition uterine cannulas
- imposition pneumoperitoneum
- introduction the first trocar and the beginning of the examination bodies abdominal cavity ( diagnostic stage laparoscopy )
- introduction additional trocars for manipulators
- deepened revision bodies abdominal cavities
- operative stage laparoscopy
- final stage laparoscopy - removal of the macropreparation, washing abdominal cavities , control of hemostasis, removal of gas and instruments
- imposition single seams or brackets in places punctures on the skin .

When performing laparoscopy adhere to general rules of conduct operational manipulations .

To control hemostasis during laparoscopic procedures interventions use the same methods as in open surgery: electrocoagulation of blood vessels, clipping them, sewing and applying knotted seams, sewing with the help of sewing machines.

In the majority cases creation pneumoperitoneum perform in a closed way with the help of needles Veresha , which is injected into the abdomen cavity slightly below the umbilicus a ring The trocar is inserted through the incision skin , with moderate pressure , at an angle of 90° to the peritoneum and at this moment it is turned in one movement up by 45°. After introduction of the main trocar stylet it taken out and in the abdomen cavity enter laparoscope . The patient is transferred to the position Trendelenburg and examined abdominal cavity , including the upper floor.

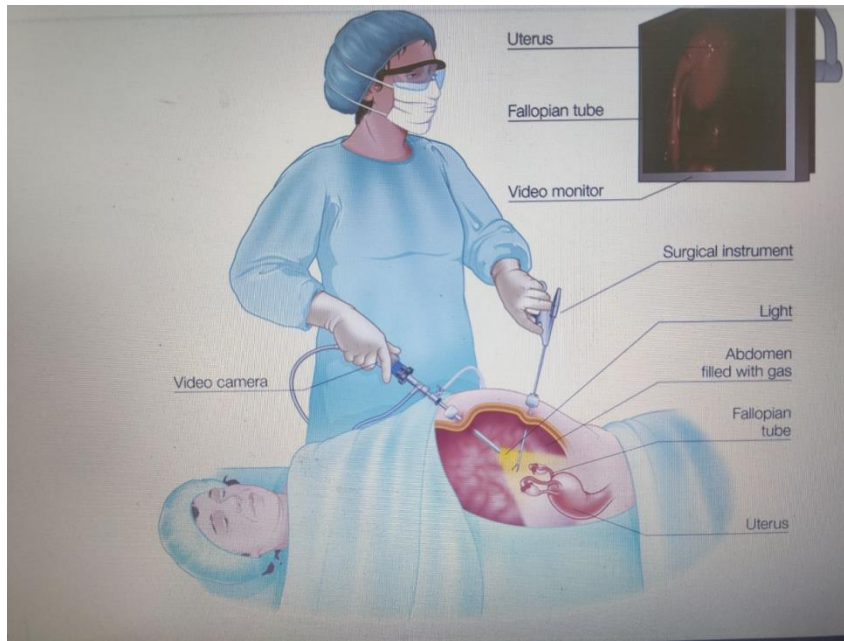


Fig. 1. Operative laparoscopy

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 myomectomy**

includes 4 main stages:

1. hydropreparation and extraction of the capsule (Fig. 2)
2. enucleation (removal) of the myomatous node (Fig. 3)
3. hemostasis of the vascular bed
4. suturing to restore the normal anatomy of the uterus (Fig. 4)
5. removal of a tumor from the abdominal cavity

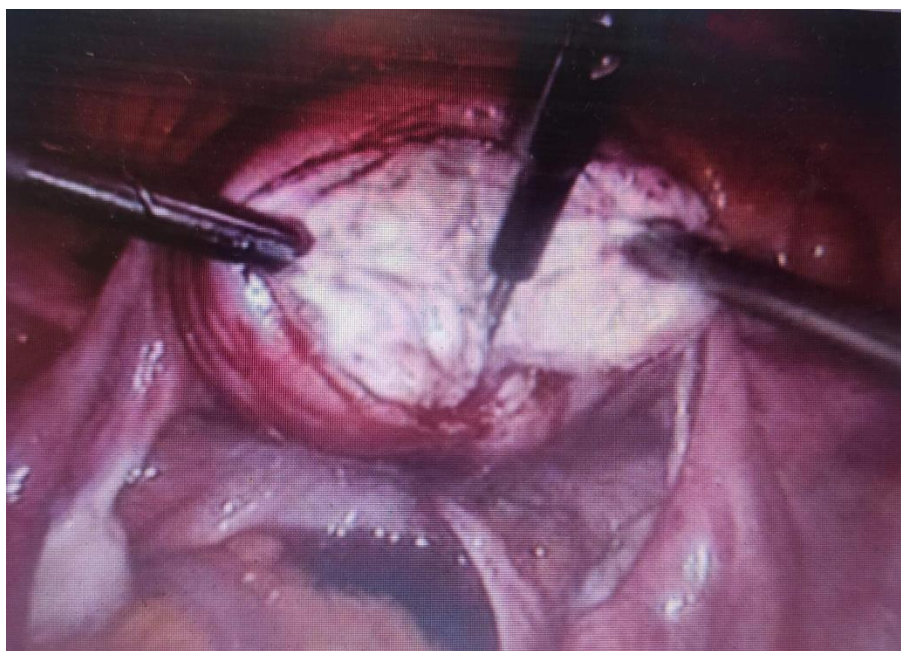
Hydropreparation and extraction of the capsule. To facilitate allocation

hydropreparation of the myomatous node using a puncture needle and 0.25% adrenaline solution is used. This method also allows you to reduce the amount of blood loss during tissue dissection.

Different types of energy are used for dissection: electrocoagulator, laser, harmonic scalpel, argon beam and excision with scissors. The electroknife should be slowly dipped into the body of the uterus until the whitish surface of the node appears and the capsule is identified, as in Figure 2.

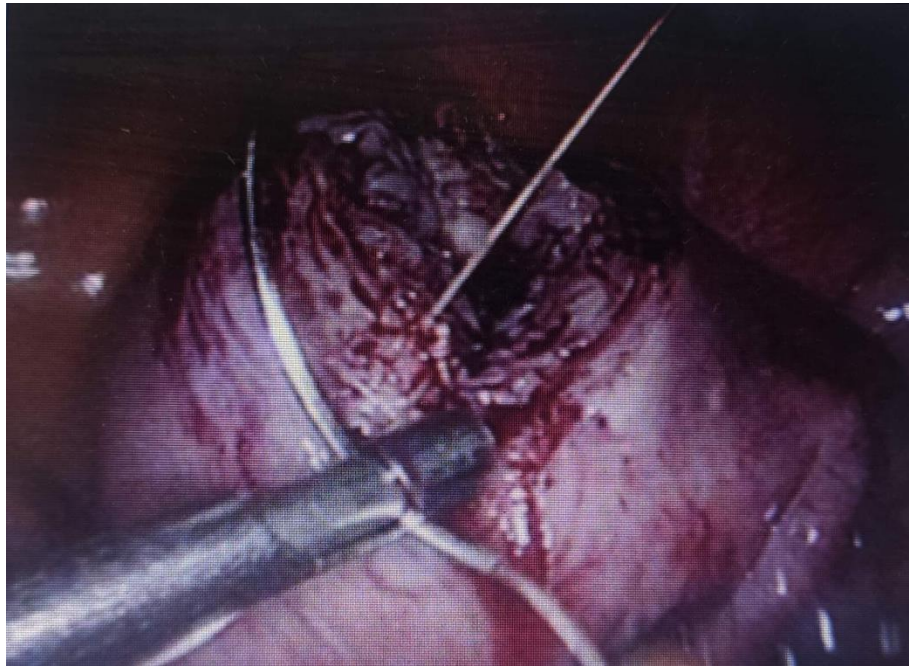


**Fig. 2.** Isolation of the myomatous node capsule.



**Fig. 3.** Removal of myomatous node.



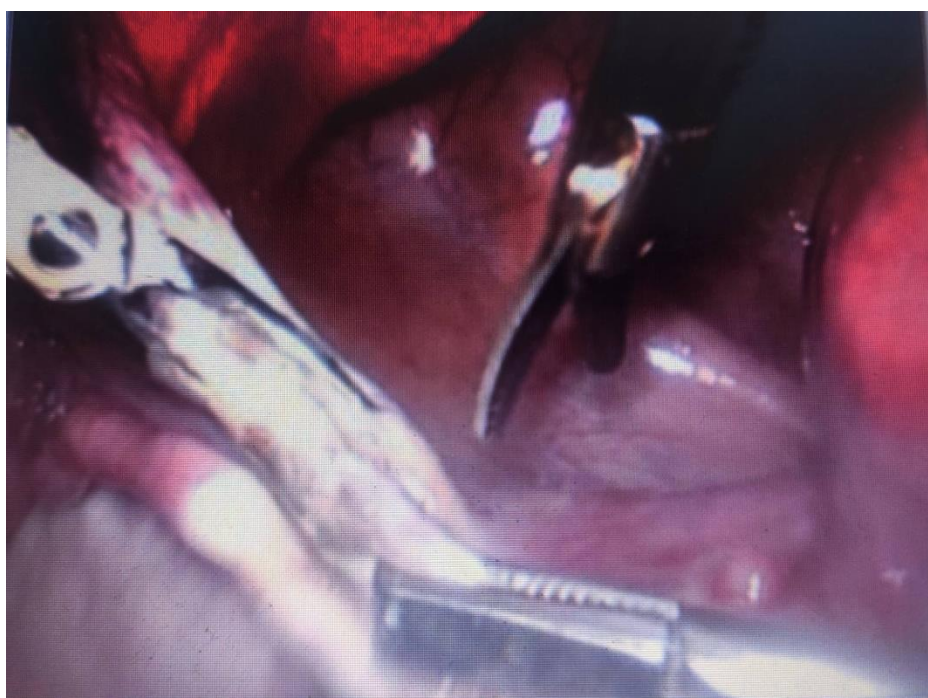


**Fig. 4. Suturing the bed of the myomatous node.**

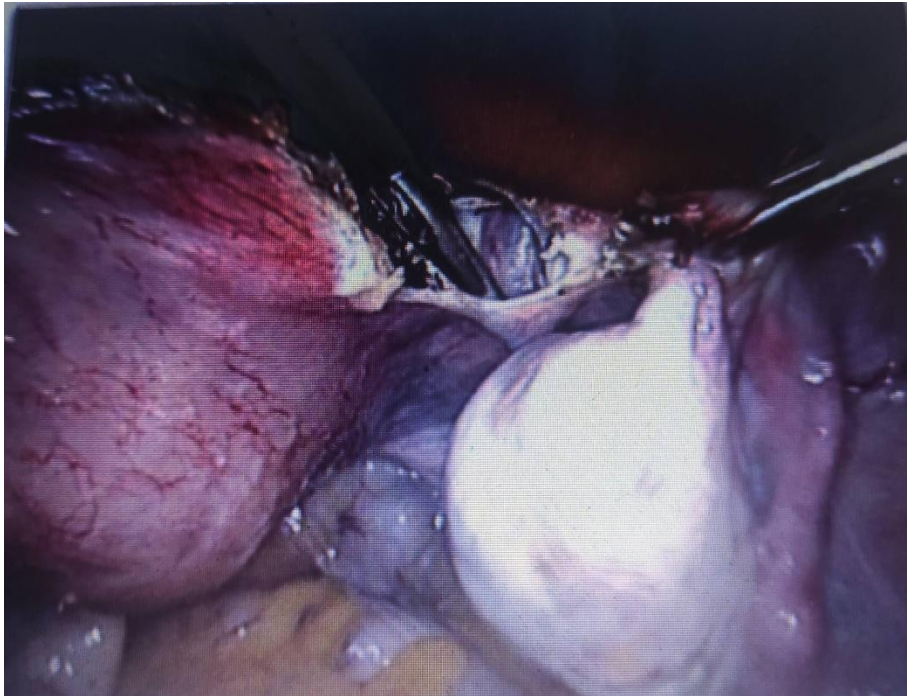
### **Laparoscopic hysterectomy**

#### **Stages of the operation:**

- 1) Section of the round ligaments of the uterus (Fig. 5)
- 2) section of the upper part of the ligamentous apparatus (Fig. 6)
- 3) bladder dissection (Fig. 7)
- 4) intersection of the lumbar and uterine ligaments
- 5) hemostasis of uterine vessels (Fig. 8)
- 6) cutting off the uterus from the walls of the vagina
- 7) withdrawal of the macropreparation



**Fig. 5. Section of the round ligaments of the uterus.**

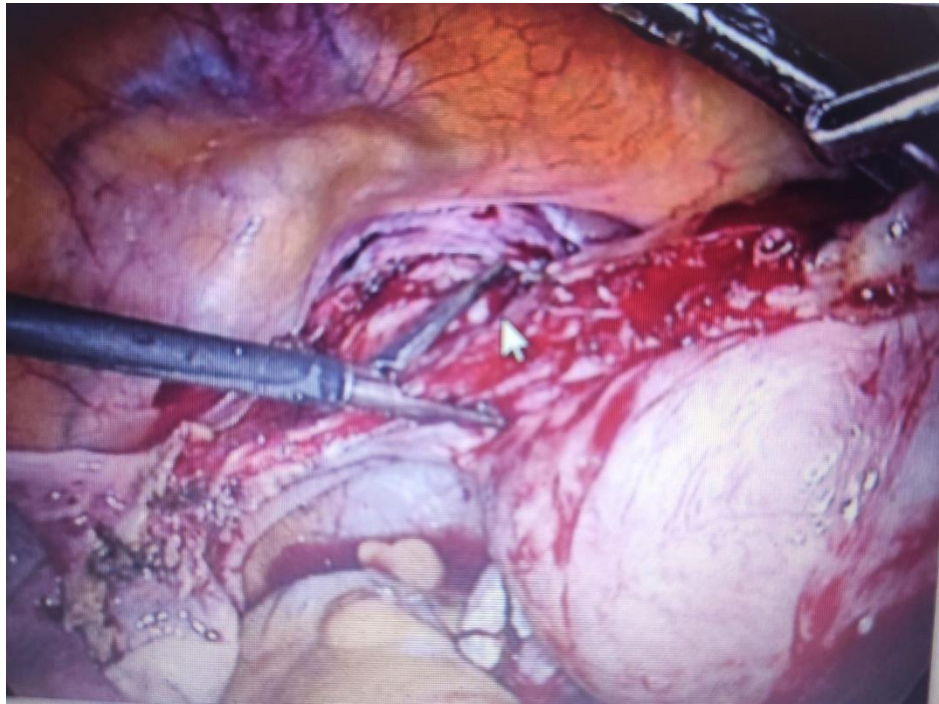


**Fig. 6. Formation of a window in the broad ligament of the uterus.**



**Fig. 7. Bladder dissection .**





**Fig. 8. Coagulation of uterine arteries.**

#### **Enucleation (extraction) of the ovarian tumor capsule (Fig. 9)**

It is performed in the presence of ovarian neoplasms and consists in its removal while preserving healthy ovarian tissue.

The tissue of the ovary above the capsule of the tumor is dissected with scissors, the branches of which are separated, thereby expanding the space between the capsule of the tumor and the ovary.

The tissue of the ovary is dissected at the required distance for further manipulations. The tumor is excised bluntly and, after placing it in a special container, is evacuated from the abdominal cavity. Dissection of the capsule is carried out while it is in the container to prevent the spread of the tumor contents in the abdominal cavity. Hemostasis of the tumor bed is carried out with the help of electrocoagulation.



**Fig. 9. Enucleation of the ovarian tumor capsule. Operation stage.**

Algorithm for performing practical skills.

*Bimanual (vaginal) examination:*

- 1) say hello to the patient;
- 2) identify the patient (name, age);
- 3) to 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) with the first and second fingers of the left (right) hand, spread the labia majora, 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 (dense, soft);
- 12) determine the patency of the external os of the cervical canal (closed, a fingertip passes through);
- 13) to assess the painfulness of the excursion of the cervix;
- 14) the second palm should be carefully placed on the stomach (above the symphysis) and moderately pressed to determine the bottom of the uterine body;
- 15) take 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);



- the consistency of the body of the uterus (tight-elastic, soft, compacted);
  - mobility of the uterus (relatively mobile, limited mobility);
  - sensitivity during palpation (painful, painless);
- 16) place your fingers in the bottom of the right lateral vault and, using both hands, palpate the right vaginal vault and right appendages of the uterus, determine their size, mobility and pain;
  - 17) place your 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;
  - 18) determine the capacity of the vaginal vaults;
  - 19) inform the patient about the results of the study;
  - 20) thank the patient;
  - 21) remove examination gloves;
  - 22) wash hands

— **Requirements for results work , including to registration .**

- Evaluate the results of additional research methods (laboratory, endoscopic, MRI, CT).
- Perform gynecological examination in simulation classes using high-tech simulators
- Be able to justify the diagnosis of a patient with benign tumors of the female genital organs on the basis of complaints, anamnesis, clinic, differential diagnosis of the thematic patient (standardized patient).
- Be able to provide recommendations on the choice of a method of surgical treatment
- To be able to justify the required amount of surgery for different types of uterine fibroids
- To be able to justify the required amount of surgery for various variants of ovarian tumors, depending on the nature of the tumor and the age of the patient.

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

**Unusual situational tasks:**

**Task 1.**

A 48-year-old patient complained about the fact that in the last 8-9 months menstruation has been very abundant, causing anemia , impaired working capacity. For 2 years, he has been under the supervision of a gynecologist for uterine fibroids. Objectively : the cervix is cylindrical , clean, open closed \_ The body of the uterus is in a normal position , enlarged to 9–10 weeks pregnancy , with uneven surface , mobile , painless . Appendices from both parties are not defined . Parameters are free Vault deep \_ Allocation mucous \_ Preliminary diagnosis. Patient management tactics.

**Answer standard:** Myoma of the uterus. Chronic abnormal uterine bleeding. Anemia.

Surgical treatment in the volume Laparoscopic assistance of vaginal hysterectomy without appendages.

**Task 2.**

A 24-year-old patient complains of pain in the lower abdomen, which worsens sharply before and during menstruation. He has been sick for about a year. By this time, the periods were normal. Sex life since 20 years. Two years ago, she gave birth to a child, childbirth and the postpartum period without complications. The general condition is not disturbed. T — 36.6°C, Ps — 86 beats /minute, AT-120/70 mm Hg . Art. Abdomen is soft, painless. When examined in mirrors: the neck is cylindrical, clean, the eye is closed. Bimanual : uterus of normal size, sedentary. To the right of the uterus, a tumor -like formation of 4 x 6 cm, fused with the uterus, painful on palpation is determined . On the left, appendages without pathology. Parameters are free. According to the ultrasound of the pelvic organs: a tumor -like formation of 4x6 cm. The conclusion is an endometrioid cyst of the right ovary. The patient was offered surgical treatment. Determine the volume of surgical intervention shown to the patient

**Answer standard:** Laparoscopy. Enucleation of the cyst capsule of the right ovary.

**Test tasks KROK-2:**

1. (2020) During the professional examination , it was established that a 23-year-old woman had no pregnancies. Bimanual examination revealed: the body of the uterus of normal size, on the front wall - a dense rounded formation on the leg, connected with the uterus, up to 6 cm in diameter, painless, appendages without features. With the help of ultrasound, the diagnosis of subserous uterine myoma was confirmed. What method of treatment should be offered?

- A. Conservative myomectomy \*
- B. Amputation of the uterus
- B. Defundation of the uterus
- G. Extirpation of the uterus
- D. High supravaginal amputation of the uterus

2. (2019) A 32-year-old woman turned to a doctor with complaints about the absence of pregnancy for 4 years. In the anamnesis: 5 years ago, the first pregnancy ended with an artificial abortion. According to vaginal examination and ultrasound examination (ultrasound), the diagnosis was established: \* endometrioid cyst of the right ovary. What is the optimal method of treatment?

- A. Anti-inflammatory therapy
- B. Androgen therapy
- B. Conservative therapy with estrogen - progestogenic drugs
- G. Sanatorium-resort treatment

D. Operative laparoscopy \*

3. (2019) A 40-year-old woman came to a women's consultation with complaints of irregular menstrual cycles in the form of hyperpolymenorrhea for six months, pulling pains in the lower abdomen, weakness. During the gynecological examination, the body of the uterus is enlarged up to 12 weeks of pregnancy, dense, mobile, painless. In the blood: Hb - 90 g/l. What pathology is most likely?

- A. Cystoma of the ovary
- B. Pregnancy
- B. Myoma of the uterus\*
- D. Abnormal uterine bleeding
- D. Cancer of the uterine body

4. (2017) In the course of the medical examination , it was established that a 23-year-old woman had no pregnancies. A bi -manual examination revealed: the body of the uterus of normal size, on the front wall - a dense rounded formation on the leg, connected with the uterus, up to 6 cm in diameter, painless, appendages without features. With the help of ultrasound, the diagnosis of subserous uterine myoma was confirmed. What method of treatment should be offered?

- A. Conservative myomectomy \*
- B. Amputation of the uterus
- B. Defundation of the uterus
- G. Extirpation of the uterus
- D. Vysoka supravaginal amputation of the uterus

5. (2016) A 48-year-old patient complains of heavy menstruation. She gave birth - 2, abortions - 2. She has not consulted a gynecologist in the last 2 years. Objectively: external genital organs without pathology, the cervix is cylindrical, clean. The body of the uterus is enlarged up to 14-15 weeks of pregnancy, uneven surface, mobile, painless. The vaults are deep. The appendages are not defined, the area of the appendages is painless. Parameters are free. Mucous discharge. What is the most likely diagnosis?

- A. Myoma of the uterus\*
- B. Sarcoma of the uterine body
- B. Pregnancy 14-15 weeks
- H. Chorioepithelioma
- D. Cancer endometrium

**4. Summing up:**

**Current 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 evaluation in the practical lesson :***

Methodological recommendations of a practical lesson, EPP "Medicine", 6th course, Faculty international. Elective discipline "Endoscopic technologies in obstetrics and gynecology"

1. Evaluation of theoretical knowledge on the subject of the lesson:
  - methods: survey, solving a situational clinical problem;
  - the maximum score is 5, the minimum score is 3, the unsatisfactory score IS 2 .
2. Evaluation of practical skills and manipulations on the subject of the lesson:
  - methods: assessment of correct performance of practical skills;
  - the maximum score is 5, the minimum score is 3, the unsatisfactory score IS 2 .
3. Evaluation of work with a 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.**

**Basic:**

1. Clinical Obstetrics and Gynecology: 4th Edition / Brian A. Magowan, Philip Owen, Andrew Thomson. - 2021. - 454 p.

2. Obstetrics and gynecology: nats. textbook for medical universities of the 1st and 5th levels of accreditation in 4 volumes// National textbook in 4 volumes / V.M. Zaporozhan, T.F. Tatarchuk, I.Z. Gladchuk, V.V. Podolsky, N.M. Rozhkovska., Marichereda V.G., Volyanska A.G..-K.: VSV "Medicine", 2017. - 696 с.
3. Obstetrics and Gynecology=Акушерство і гінекологія: in 2 volumes. — Volume 2. Gynecology=Гінекологія: Підручник для мед. ун-тів, інст., акад. — 3-тє вид., стер. Рекомендовано МОЗ / За ред. В.І. Грищенка, М.О. Щербини. — К., 2022. — 352 с.
4. Oats, Jeremy Fundamentals of Obstetrics and Gynecology [Text]: Liewellyn-Jones Fundamentals of Obstetrics and Gynecology / J. Oats, S. Abraham. — 10<sup>th</sup> ed. — Edinburgh [etc.]: Elsevier, 2017. — VII, 375 p.
5. Williams Manual of Obstetrics (24th Ed) F. G. Cunningham, K. J. Leveno, S. L. Bloom, C. Y. Spong, J. S. Dashe, B. L. Hoffman, B. M. Casey, J. S. Sheffield, McGraw-Hill Education/Medical. — 2014. — 1377 pp.

**Additional:**

1. Textbook of Gynecology (6th Ed) Dutta DC., Hiralal Konar (Ed.). — JAYPEE BROTHERS MEDICAL PUBLISHERS (P) LTD, 2013. — 702 pp.
2. DC Duttas Textbook of Obstetrics including Perinatology and Contraception (8th Ed.) Dutta DC., Hiralal Konar (Ed.). — JAYPEE BROTHERS MEDICAL PUBLISHERS (P) LTD, 2015. — 782 pp.
3. Llewellyn-Jones Fundamentals of Obstetrics and Gynaecology (10th Ed). Jeremy Oats, Suzanne Abraham. Elsevier. 2016. — 384 pp.
4. Oats, Jeremy Fundamentals of Obstetrics and Gynaecology [Text]: Liewellyn-Jones Fundamentals of Obstetrics and Gynaecology / J.Oats, S.Abraham. — 10<sup>th</sup> ed. — Edinburgh [etc.]: Elsevier, 2017. — VII, 375 p.
5. Dutta, Durlav Chandra. D. C. Dutta's Textbook of Gynecology including Contraception / D.C. Dutta; ed/ Hiralal Konar. — 7<sup>th</sup>.ed. — New Delhi: Jaypee Brothers Medical Publishers, 2016. — XX, 574 p
6. Family Planning: A Universal Guide for Family Planning Providers. Updated 3rd edition 2018. Copenhagen: WHO Regional Office for Europe; 2021
7. Active " Clinical protocols ", approved by the order of the Ministry of Health of Ukraine for Obstetrics and Gynecology.

**Electronic information resources:**

1. <https://www.cochrane.org/>
2. <https://www.ebcog.org/>
3. <https://www.Acog.org/>

4. <https://www.update.com>
5. <https://online.lexi.com/>
6. <https://www.ncbi.nlm.nih.gov/>
7. <https://pubmed.ncbi.nlm.nih.gov/>
8. <https://www.thelancet.com/>
9. <https://www.rcog.org.uk/>
10. <https://www.npwh.org/>