#### MINISTRY OF HEALTH OF UKRAINE ODESA NATIONAL MEDICAL UNIVERSITY DEPARTMENT OF OBSTETRICS AND GYNECOLOGY

**CONFIRMED** by Vice-rector for scientific and pedagogical work Eduard BURIACHKIVSKYI September 1, 2023

#### THE METHODICAL RECOMMENDATIONS FOR PRACTICAL CLASS

International Faculty, Course VI

Discipline "Obstetrics and Gynecology"

**Practical lesson №28.** Topic: Urgent conditions in gynecology. Surgical operations in gynecology. Preparation and postoperative care of gynecological patients during emergency and planned operations. Prophylaxis of HIV-infecting.

Methodical development of a practical lesson. «Health care», master's degree in the specialty "Medicine". Discipline "Obstetrics and Gynecology"

#### Approved:

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

Protocol No. 1 dated August 28, 2023.

Head of the Department, Doctor of Medicine, Professor \_\_\_\_\_(I.Z. Gladchuk)

Developer: Ph.D., assistant professor of (O.M. Nadvorna) obstetrics and gynecology department

Methodical development of a practical lesson. «Health care», master's degree in the specialty "Medicine". Discipline "Obstetrics and Gynecology"

## Practical lesson № 28.

# URGENT CONDITIONS IN GYNECOLOGY. SURGICAL OPERATIONS IN GYNECOLOGY. PREPARATION AND POSTOPERATIVE CARE OF GYNAECOLOGICAL PATIENTS DURING EMERGENCY AND PLANNED OPERATIONS. PROPHYLAXIS OF HIV-INFECTING

**Learning objective** Familiar with modern representations about the disease, leading to "acute" abdomen in gynecology, proper use of organizational and methodological approaches to patient in extreme lack of information and time, the need to formulate as early as possible a reasonable and reliable diagnostic pituitary, to clinical diagnosis, examination to establish nosology in the course of intensive therapy and resuscitation.

#### **Basic concepts:**

1. Extrauterine pregnancy: clinics, diagnostics, tactics of GP, emergency care.

2. Ovarian apoplexy: clinics, diagnostics, tactics of GP, emergency care.

3. Rupture of ovarian tumor capsule: clinics, diagnostics, GP tactics, emergency care.

4. Torsion of tumor pedicle: clinics, diagnostics, GP tactics, emergency care.

5. Rupture of purulent tuboovarian mass: clinics, diagnostics, GP tactics, emergency care.

6. Blood supply disturbance in myomatous node: clinics, diagnostics, GP tactics, emergency care.

7. Traumatic damage of genitals: clinics, diagnostics, GP tactics, emergency care.

8. Preoperative preparation and postoperative care of gynecological patients, anesthesia during gynecological operations.

9. Rehabilitation after gynecological operations.

#### equipment

Methodical development of a practical lesson. «Health care», master's degree in the specialty "Medicine". Discipline "Obstetrics and Gynecology"

- Multimedia equipment (computer, projector, screen), TV.
- Obstetric models and obstetric instruments (pelvimeter, obstetric stethoscope, centimeter tape).
- Professional algorithms, structural-logical schemes, tables, videos.
- Results of laboratory and instrumental researches, situational tasks, patients, medical histories.

### **EDUCATIONAL TIME** – 4 h

#### A. organizational stage

- Greetings,
- checking attendees,
- defining of educational goals,
- providing of positive motivation.

A clinical questioning of the activity of treatment-prophylactic establishments testifies that the most difficulty for the doctor are clinical situations, which demand urgent help. Most frequently, the discussion is, first of all, about saving a patient's life, therefore wrong or delayed actions, mistakes in the choice of tactics, methods and means of providing urgent help to pregnant women are serious and have some very tragic consequences. On the contrary, correct and prompt, rationally planned and cautious methods of conducting urgent help can not only save the patient's life, but also save her reproductive function.

The concept of "acute abdomen" unites a group of acute diseases of the abdominal cavity, different in etiology and character of clinical course. The diagnosis "acute abdomen" is not exact. It only displays the presence of disorder in the abdominal cavity, without indicating in which organ this process is occurring. The complex of symptoms of "acute abdomen" is given by a number of diseases not only the organs of the abdominal cavity, but also the thorax, for example myocardial infarction, spasm of the coronal arteries, aortal aneurysm, inflammation of the lower lobe of the lungs.

Methodical development of a practical lesson. «Health care», master's degree in the specialty "Medicine". Discipline "Obstetrics and Gynecology"

**control of basic knowledge** (written work, written testing, online testing, face-to-face interview, etc.)

# 2.1. Requirements for the theoretical readiness of students to perform practical classes.

#### **Knowledge requirements:**

- Communication and clinical examination skills.
- Ability to determine the list of required clinical, laboratory and instrumental studies and evaluate their results.
- Ability to make a preliminary and clinical diagnosis of the disease
- Ability to perform medical manipulations
- Ability to determine the tactics of physiological pregnancy, physiological labor and the postpartum period.
- Ability to keep medical records.

#### List of didactic units:

1. Make plan of examination using modern methods of diagnostics, analyze data of laboratory and instrumental tests in precancerous and malignant diseases of female genitals and state preliminary diagnosis;

2. Gather special gynecologic anamnesis.

3. Estimate results of:

• laboratory test (general and biochemical blood analyses, urine test, coagulation test and so on);

- microscopy of urogenital swab;
- oncocytological analysis;
- bacteriological analysis;
- colposcopy, ultrasonic examination;
- functional test.

Methodical development of a practical lesson. «Health care», master's degree in the specialty "Medicine". Discipline "Obstetrics and Gynecology"

4. Perform gynecological examination (speculum, bimanual, rectal examinations).

5. Obtain analyses material from vagina, cervical canal and urethra.

6. Conduct examination plan of patients with different types of gynecological pathology.

7. Determine emergency aid tactics in "acute abdomen" in gynecology.

8. Conduct preoperative preparation plan for planned and urgent gynecological operations. Conduct management plan in postoperative period.

2.2. Questions (test tasks, tasks, clinical situations) to test basic knowledge on the topic of the class.

#### **Questions:**

1. Extrauterine pregnancy: clinics, diagnostics, tactics of GP, emergency care.

2. Ovarian apoplexy: clinics, diagnostics, tactics of GP, emergency care.

3. Rupture of ovarian tumor capsule: clinics, diagnostics, GP tactics, emergency care.

4. Torsion of tumor pedicle: clinics, diagnostics, GP tactics, emergency care.

5. Rupture of purulent tuboovarian mass: clinics, diagnostics, GP tactics, emergency care.

6. Blood supply disturbance in myomatous node: clinics, diagnostics, GP tactics, emergency care.

7. Traumatic damage of genitals: clinics, diagnostics, GP tactics, emergency care.

8. Preoperative preparation and postoperative care of gynecological patients, anesthesia during gynecological operations.

9. Rehabilitation after gynecological operations

formation of professional skills (mastering skills, conducting curation, determining the treatment regimen, conducting a laboratory study, etc.).

Methodical development of a practical lesson. «Health care», master's degree in the specialty "Medicine". Discipline "Obstetrics and Gynecology"

### 3.1. Content of tasks (tasks, clinical situations, etc.).

#### **Interactive task:**

Students of the group are divided into 3 subgroups of 3-4 people each. They work in the classroom, reception department of the maternity or gynecological hospital, surgery room.

Tasks:

- Subgroup I Gather special gynecologic anamnesis. Prepare a plan of inspection sick with various kinds of gynecological diseases. Make the plan of preoperative preparation at planned and urgent gynecologic operations. Management of the postoperative period.
- Subgroup II Perform gynecological examination- Taking material from the vagina, cervical canal and urethra for examination.- Evaluate: the results of urogenital smear microscopy, cytological examination, colposcopy; results of bacteriological and other methods; results of ultrasound examination; results of functional tests
- Subgroup III to assess answers of subgroups I and II and makes adjustments.

### **Tests:**

Direction: For each of the multiple- choice questions select the lettered answer that is the one best response in each case.

1. A woman complains of sudden pain in the abdomen, which irradiye the anus, nausea, dizziness, dark bloody discharge from the genital tract during the week, delay menstruation for 4 weeks. Symptoms of peritoneal irritation positive. In the mirror, cyanosis of the mucous membranes of the vagina and cervix. In bimanual study notes symptom of "uterus floating" pain and bulging rear and right side of the vaults of the vagina. The most likely diagnosis?

- A. Acute appendicitis.
- B. apoplexy ovary.

Methodical development of a practical lesson. «Health care», master's degree in the specialty "Medicine". Discipline "Obstetrics and Gynecology"

- S. acute right-adnexitis.
- D. tilting legs ovarian tumor.
- + E. ectopic pregnancy.

2. The 24-year-old woman complains of bloody spotting, vaginal discharge and pain in the right iliac region. In the history of irregular menstrual cycle. Last menstruation 7 weeks ago. During bimanual examination the uterus is not enlarged, painless. Title chorionic gonadotropin 1000. Tactics doctor?

- A. diagnostic laparoscopy.
- B. Ultrasound pelvic organs.
- C. Kuldoskopiya.
- + D. Re-definition CG 24 hours.
  - E. Repeated studies of hCG in a week.

3. Woman '17 worried about sharp pain below the abdomen. Notes the delay menstruation for 2 weeks. Sex life during the year. Guarded pregnancy interrupted sexual intercourse. Objectively: pale. 36,60S body temperature, blood pressure 95/60 mm Hg, pulse 90 beats / min. If bimanual examination is defined slightly enlarged uterus, cervix tours painful appendages expressly konturuyutsya, rear arches vypnute. Discharge from the genital tract dark bloody miserable. The most informative method:

- A. Ultrasound of the pelvic organs.
- B. Complete blood.
- C. puncture the abdominal cavity through the posterior vaginal vault.
- D. colposcopy.
- + E. Laparoscopy.

Methodical development of a practical lesson. «Health care», master's degree in the specialty "Medicine". Discipline "Obstetrics and Gynecology"

4. A woman worries acute abdominal pain, fever up to 38,0 ° C. Knows the presence of uterine fibroids 3 years. Symptoms of peritoneal irritation positive in the lower abdomen. WBC 10.2 T / L, erythrocyte sedimentation rate 28 mm / h. In bimanual study of uterine body increased to 8-9 weeks of pregnancy, on the front surface - dramatically painful myoma node size 4x4 cm, uterine appendages not changed. Ultrasound confirms that subserous myoma node. What is the most likely diagnosis?

- A. Internal endometriosis.
- B. tuboovarialnogo tumor.
- + C. Necrosis myoma node.
  - D. Acute adnexitis.
  - E. perimetrity.

5. A woman complaining of abdominal pain that iradiyuye the anus, dizziness, occurring after coitus. In the history of inflammation of the uterus 7 years. 15-day menstrual cycle. Skin pale, soft abdomen, painful, positive symptoms of peritoneal irritation. Pulse 110 beats / min. If bimanual examination defined by increased spherical, painful right ovary, painful back and right lateral vaginal vault. No bleeding. Probable cause "acute abdomen":

- A. ovarian tumors with malnutrition.
- + B apoplexy ovary.
  - C. ectopic pregnancy, which was interrupted by the type of tubal abortion.
  - D. What interrupted the type of pipe rupture, ectopic pregnancy.
  - E. exacerbation of chronic adnexitis.

6. Gynecology department received ill '20 complaining of a sharp pain in the abdomen after exercise. Last menstruation 2 weeks ago. When vaginal examination

Methodical development of a practical lesson. «Health care», master's degree in the specialty "Medicine". Discipline "Obstetrics and Gynecology"

the uterus is not enlarged, painless, left appendage sharply painful on palpation, making it difficult to study. Symptom Promtova positive. The rear arches looming, painful. Pulse 96 beats / min., BP 100/60 mmHg What kind of pathology it is?

- A. Acute left-sided salpingo.
- + B. apoplexy left ovary.
  - C. piosalpinks left.
  - D. violated left-sided tubal pregnancy.
  - E. tumor of the left ovary.

7. Woman '26 delivered to the receiving department with complaints of sudden pain in the lower abdomen, weakness, loss of consciousness at home. Last menstruation 2 months ago. Hb 106 g / L, pulse 120 / min, blood pressure 80/50 mmHg Pain and symptoms of peritoneal irritation at the bottom right. What is the most likely diagnosis?

A. apoplexy ovary.

- B. Torsion ovarian cyst legs.
- C. Acute appendicitis.
- D. Acute adnexitis.
- + E. impaired tubal pregnancy.

8. Gynecological hospital received a woman complaining of a sharp pain in the lower abdomen. A year ago at prophylactic examinations diagnosed tumor of the right ovary. From the operation refused. An examination of women Note the positive symptoms of peritoneal irritation. Bimanual - normal size uterus, painless, right size is determined by the formation of up to 8 cm, sharply painful, dense, with clear contours. Possible diagnosis?

- + A. Torsion ovarian cyst legs
  - B. Ectopic Pregnancy

Methodical development of a practical lesson. «Health care», master's degree in the specialty "Medicine". Discipline "Obstetrics and Gynecology"

- C. Acute right sided adnexitis
- D. Rupture of ovarian cysts
- E. pelvioperitonit

9. Patient '39 complaining of acute abdominal pain, vomiting, frequent urination. On examination, the abdomen swollen moderately positive symptom Schotkyna-Blumberg. Pulse 88 per minute, body temperature of 37  $^{\circ}$  C. If bimanual examination: uterine body tight, not increased, mobile, painless, and right in front of the formation of palpable uterus size 6x6 cm tuhoelastychnoyi consistency, sharply painful shear; left appendages are not defined; vault free; mucus. What is the most likely diagnosis?

- A. Intestinal obstruction.
- B. Renal colic.
- C. apoplexy ovary.
- + D. torsion stem tumor of the ovary.
  - E. Acute inflammation of the uterus tuboovarialnogo form on the right.

10. Patient '28 addressed with complaints of intense pain in the lower abdomen, fever up to  $39 \degree$  C, and nausea. Ill after menstruation. Sex life outside of marriage. The abdomen is painful on palpation in the lower divisions. Symptom Schitkyna-Blumberg positive. In the study, the contours of the uterus and appendages are not clearly defined by the tension of the anterior abdominal wall. The rear arches sharply painful. Bold pus. What is the most likely diagnosis?

- A. Adenomyosis
- B. parametrit
- + C. pelvioperitonit
  - D. Appendicitis
  - E. Torsion ovarian cyst legs

Methodical development of a practical lesson. «Health care», master's degree in the specialty "Medicine". Discipline "Obstetrics and Gynecology"

# **3.2.** Educational materials, recommendations (instructions) for performing tasks

The picture of acute abdomen is observed in the following diseases of the organs of the abdominal cavity: acute appendicitis, perforation of a stomach and intestinal ulcer, acute cholecystitis, acute pancreatitis, acute intestinal obstruction, constrained hernia, as a result of trauma to the organs of the abdominal cavity, etc., and also renal colic.

From gynecologic diseases, the picture of "acute abdomen" is most frequently observed: extrauterine pregnancy, ovarian apoplexy, twisted of pedicle of a cyst (tumours) of the ovary or serous myomatic node, necrosis and rupture of tumours of the internal genitals, acute inflammatory diseases of the internal genitals (pyosalpinx, pelviperitonitis, peritonitis).

The basic symptom for the clinical picture of "acute abdomen" is pain, which can be of different character and intensity. Rigidity of the abdominal wall, positive symptoms of irritation of the abdomen, the presence of liquid in the abdominal cavity are marked during peritonitis and intra-abdominal bleedings.

Vomiting hiccups, delay of stool and gas - characteristic attributes of peritonitis, it also includes both "Hippocrates's face" and moderate abdominal breathing.

An increase in body temperature, difference between pulse rate and temperature, change in the blood parameters - characteristic attributes of pelvioperitonitis and peritonitis.

It is necessary for the students to pay attention to the fact that "acute abdomen" occurs during different gynecologic pathologies, which creates a threat to the woman's life and demands precise and fast medical action. Therefore, diagnostics should also be fast and precise for "acute abdomen". The predominant use of these or those methods of diagnostics depend on the complex of symptoms of "acute abdomen".

Extra-uterine pregnancy, ovarian apoplexy, rupture of ovarian tumor capsule, torsion of tumor pedicle, rupture of purulent tuboovarian mass, blood supply disturbance in myomatous node.

Methodical development of a practical lesson. «Health care», master's degree in the specialty "Medicine". Discipline "Obstetrics and Gynecology"

#### Extrauterine pregnancy

All cases of development of the fetal egg outside the uterine cavity are referred to as extrauterine pregnancy. Depending on the location of implantation of the fetal egg, extrauterine pregnancies are subdivided into tubal, ovarian, in the rudimentary uterine horn and abdominal.

Etiology and pathogenesis. Implantation of fetal egg outside of the uterine cavity occurs due to transport dysfunction of fallopian tubes, change in the properties of the fetal egg itself.

Tubal dysfunction is connected to:

- Inflammatory processes of any etiology;
- Hormonal status of an organism;
- Surgical intervention on the tubes.

Clinic and diagnostics. In urgent gynecology, more often disrupted tubal pregnancies occur – tubal rupture or tubal abortion.

Pregnancy, disrupted by tubal rupture: acute beginning, which for some women is preceded by a delay in menstruation, pain in the lower stomach distributed to the rectum, subclavicular and supraclavicular areas, shoulder or scapula, is accompanied by nausea or vomiting, dizziness, to the point of loss of consciousness, sometimes diarrhea.

The patient is frequently hindered, less often shows attributes of anxiety; the skin and mucous are pale, extremities are cold, rapid, superficial respiration. Tachycardia, weak-filling pulse, arterial pressure is reduced. Tongue is moist, not covered with a film. The stomach is a little bloated; tension of muscles of the abdominal wall is absent. During palpation – pain in the lower stomach, more on the affected side, also symptoms of irritation of the abdomen are expressed. During percussion - dullness in the stomach.

During examination with the speculums: cyanosis and paleness of the mucous of the vaginas and exocervix. Bimanual examination (very painful) reveals a flattening or protrusion of the posterior or one of the lateral vaults. The uterus is easily shifted, as though it is "floating" in free liquid.

Methodical development of a practical lesson. «Health care», master's degree in the specialty "Medicine". Discipline "Obstetrics and Gynecology"

If there is any doubt in the correctness of the diagnosis, a puncture of the abdominal cavity through the posterior vaginal vault is done.

Disruption of a tubal pregnancy as tubal abortion represents diagnostic difficulties, because it is characterized by slow course and does not have a distinct influence on the general condition of the patient. It is necessary to emphasize, that a carefully collected anamnesis gives invaluable help in the diagnostics of tubal abortion. The basic triad of symptoms for tubal abortion: delay in menstruation, pain in the stomach, bloody discharge from the vagina.

The stomach is soft, painless during palpation. During examination in the speculums: loosening and cyanosis of the mucous membrane and bloody discharge from the cervical canal. During bimanual examination: little enlarged uterus, unilateral enlargement of the appendages (frequently sausage-shaped form); the vaginal vaults can remain high or flattened.

Additional methods of examination: - Determine chorionic gonadotropin (CG) in the blood serum and urine. - Ultrasound.

- Laparoscopy.
- Histological study of scrape from the endometrium.

Treatment can be surgical and conservative. Surgical treatment for tubal pregnancy in most cases consists of salpingectomy. The purpose of such treatment is to preserve the woman's life. In the cases of uncomplicated severe bleeding organsaving operations can be performed, some of them – during laparoscopy: salpingectomy, segmental resection and anastomosis, fimbrial evacuation. In connection with a certain risk of developing trophoblastic tumor, it is recommended to study the level of CG 2-3 weeks after the operation for comparison with the previous level. For persisting or increased levels of CG, repeated studies or therapy with methotrexate are performed.

Conservative treatment with the use of methotrexate is seldom used as an independent method.

Laparotomy performed in the diagnosis of ectopic pregnancy interrupted. The delay in the operation could lead to catastrophic consequences. The first measures to be patient withdrawal from the shock, stop bleeding and support the cardiovascular system.

Methodical development of a practical lesson. «Health care», master's degree in the specialty "Medicine". Discipline "Obstetrics and Gynecology"

Algorithm for treatment of ectopic pregnancy.

The principles of management of patients with ectopic pregnancy:

1. Suspected ectopic pregnancy is an indication for immediate hospitalization.

2. Early diagnosis helps reduce the number of complications and allows you to use alternative therapies.

3. If the diagnosis of ectopic pregnancy is necessary to make urgent surgery (laparoscopy, laparotomy).

Surgical treatment of ectopic pregnancy is optimal. In modern practice may use conservative treatment of ectopic pregnancy.

4. In case of severe clinical picture excited ectopic pregnancy, presence of hemodynamic disorders, hypovolemia patient hospitalized immediately for immediate surgery as soon as possible laparotomichnym access.

If the clinical picture is erased, no signs of internal bleeding and hypovolemia conduct pelvic ultrasound and / or laparoscopy.

5. Prehospital in case of violation of ectopic pregnancy is determined by the volume of emergency room patient's general condition and size of blood loss. Infusion therapy (volume, speed of solution) depends on the stage of hemorrhagic shock (see. Protocol - "Hemorrhagic shock").

6. Hard condition of the patient, presence of severe hemodynamic disturbances (hypotension, hypovolemia, hematocrit less than 30%) -absolyutni indications for surgery with removal of access laparotomnoy pregnant fallopian tube and holding antishock therapy.

7. Apply a comprehensive approach to the treatment of women with ectopic pregnancy, including:

a) surgery;

b) the fight bleeding, hemorrhagic shock, blood loss;

c) the postoperative period;

d) the rehabilitation of reproductive function.

Methodical development of a practical lesson. «Health care», master's degree in the specialty "Medicine". Discipline "Obstetrics and Gynecology"

8. Surgical treatment is carried out as laparotomic and laparoscopic access. The advantages of laparoscopic techniques include:

-reduction length transaction;

-reduction duration of postoperative period;

-reduction length of stay in hospital;

-zmenshennya number scarring of the anterior abdominal wall;

cosmetic effect.

9. Implementation of organ operations for ectopic pregnancy is accompanied by the risk of postoperative persistent trophoblast resulting from its incomplete removal of the fallopian tubes and abdominal cavity. The most effective method of prevention of complications is closely toilet abdominal 2 to 3 liters of saline and single administration of methotrexate in doses of 75 -100 mg vnutrishnom'yazovou first, second days after surgery.

#### Ovarian apoplexy

Apoplexy of the ovary (rupture of the ovary). The contributing factors include transferred inflammatory processes, located in the small pelvis, which led to sclerous changes in a tissue of the ovary and vessels, congestive hyperemia and varicose veins. The role of endocrinal factors is not excluded. Bleeding from of the ovary can be the result of diseases of the blood with coagulation disorders.

Rupture of the ovary can occur during different phases of the menstrual cycle, but in a majority of the cases – during the second phase.

3 clinical forms of the disease are distinguished: anemic, pain and mixed.

In the clinical picture of the anemic form, symptoms of intraperitoneal bleedings prevail. The beginning of the disease can be connected with physical traumas, physical strain, sexual intercourse, and can begin for no apparent reason. Acute intensive pain in the abdomen appears in the second half or middle of the cycle. Quite often the pain spreads to the rectum, external genitals, sacrum; the phrenicus symptom can be observed.

Methodical development of a practical lesson. «Health care», master's degree in the specialty "Medicine". Discipline "Obstetrics and Gynecology"

The pain attack is accompanied by weakness, loss of consciousness, nausea, sometimes vomiting, cold sweat, unconsciousness. During examination, pallor of the skin and mucous membranes, tachycardia with a normal body temperature are paid attention to. Depending on the volume of blood loss, the arterial pressure can decrease. The stomach remains soft, a little bloated. Tension of the muscles of the abdominal wall is absent. During palpation of the stomach, extended pain in the lower half of the stomach is found. Symptoms of irritation of the abdomen are expressed in different degrees. Percussion of the stomach can reveal the presence of free liquid in the abdominal cavity.

During bimanual (rather painful) examination, the normal sizes of the uterus, sometimes – an enlarged painful spherical ovary are determined. During significant bleeding, overhanging and painful posterior and\or lateral vaginal vaults are found.

In the clinical blood analysis, the picture of anemia prevails.

The pain form of ovarian apoplexy is observed in the case of hemorrhages in the tissue of the follicle or yellow body without bleeding or with a small amount of bleeding in the abdominal cavity.

The disease begins sharply with an attack of pain in the lower abdomen, which is accompanied by nausea and vomiting, with a normal temperature. Attributes of internal bleeding are absent. The stomach is, more often, soft, but some tension of the muscles of the abdominal wall in the iliac area can be found. Palpation of the stomach is painful in the lower areas; moderately expressed symptoms of irritation of the abdomen are determined in the same place. Free liquid in the abdominal cavity can not be found. There are no bloody discharges from the genital tract.

During internal gynecologic examination, the normal sizes of the uterus, shifting which causes pain, and little enlarged round painful ovary are determined. The vaginal vaults remain high.

The clinical blood analysis does not reveal significant deviations from normal.

Treatment of ovarian apoplexy depends on the degree of intra-abdominal bleeding. The anemic form of the disease demands surgical treatment, the volume which can vary. If a rupture of the yellow body occurred, it should be sutured with haemostatic T-shaped sutures. The most typical operation is resection of the ovary. The ovary is removed entirely only when all of its tissue is saturated with blood.

Methodical development of a practical lesson. «Health care», master's degree in the specialty "Medicine". Discipline "Obstetrics and Gynecology"

In recent years, the opportunity for conducting sparing operations with the use of laparoscopy, during which evacuation of the blood, which is in the abdominal cavity is performed, and coagulation of area of the ovary, which is bleeding has appeared.

The pain form of apoplexy of the ovary without the clinical attributes of increasing internal bleeding can be treated conservatively. Rest, cold on the lower stomach, preparations with haemostatic action, vitamins are prescribed. Conservative therapy is carried out in the hospital under the supervision of medical personnel.

#### Rupture of ovarian tumor capsule

Capsule rupture can occur at any neoplasm of the uterus. The reason for the gap hyperextension of tumor capsule. Possible independent capsule rupture. Contributing moments are: gross vaginal examination, injury, physical stress. The most common fractures occur in the capsule cysts. The collapse of ovarian cancer also leads to perforation of the tumor capsule.

The clinical picture. Start acute disease. Sharp pains in the stomach, sometimes with loss of consciousness. Breath of learning, can be shortness of breath. Pulse frequent, blood pressure can be reduced. Contact with the contents of the cyst or tumor in the abdominal cavity causing peritoneal irritation symptoms. In some cases, the capsules rupture accompanied by profuse bleeding from the ovary of vessels and the development of shock. The general condition of the patient moderately severe, severe or very severe. Bloating, sharply painful to palpation, anterior abdominal wall muscles are tense, Shchetkina-Blumberg positive symptom. The clinical picture is often similar to that in an ectopic pregnancy, occurring both on the type of tubal abortion, and the type of rupture of the fallopian tube, ovary apoplexy when, pelvioperitonit. Diagnosis is complicated by the fact that after the rupture of the tumor is not palpable. Prehospital correct diagnosis is rare. diagnostic errors in the prehospital phase in this case is not of fundamental importance, as any patient if she has very pronounced symptoms of peritoneal irritation and the inability to exclude intra-abdominal bleeding requires emergency hospitalization and surgery.

Urgent care. Emergency hospitalization. When transporting the emergency aid it depends on the condition of the patient.

Methodical development of a practical lesson. «Health care», master's degree in the specialty "Medicine". Discipline "Obstetrics and Gynecology"

#### Torsion of tumor pedicle

Torsion of the tumor pedicle of an ovary. Tumours of different histological structure, not matted together with neighboring organs and having an expressed pedicle, are subject to twisting of the pedicle. As a rule, these are benign and borderline tumours, but malignant can also be seen.

A twisting of the tumour pedicle can be connected with a change in body position, physical strain, increased intestinal peristalsis, overfull urinary bladder, long mobile cyst pedicle.

The anatomic tumour pedicle consists of ligaments, suspending the ovary, ovarian ligament and mesoovarium. The fallopian tubes also are included in the surgical pedicle.

A twisting of the pedicle can occur suddenly or gradually, can be complete and partial. The pathologoanatomic changes in the tumour during a twisting of the pedicles depend on the speed, at which the tumour twists on its axis, and the degree of twisting. A twisting of a tumour pedicle, accompanied by the compression of arteries, results in necrotic changes in the tissue of the tumour.

Clinical picture. The disease, as a rule, begins with strong pains in the lower stomach, which are accompanied by nausea and vomiting. The body temperature during the first hours of the disease remains normal; the leucocytic reaction is not expressed.

The patient takes a compelled position in bed because of sharply occurring pain. During palpation – tension of the anterior abdomen wall, positive Blumberg's sign, intestinal paresis, delay of stool, less often - diarrhea. The body temperature can increase, rapid pulse, pale skin, cold sweat. During internal gynecologic examination a tumour is determined in the area of the uterine appendages; any attempt to shift it causes a sharp pain. Such patients demand urgent operative treatment.

Disorder of nutrition of a node of a myoma of the uterus.

Disorder of the blood supply to myomatous nodes is, basically, explained by the mechanical factor (twisting, bending, compression of the tumour). It is necessary to

Methodical development of a practical lesson. «Health care», master's degree in the specialty "Medicine". Discipline "Obstetrics and Gynecology"

take into account the features of hemodynamics during pregnancy when a significant decrease in blood flow in the uterus is marked, the features of the expressed area of the intermuscular node, an increase in the vascular tone of the small vessels, difficult venous outflow, a decrease in the speed of filling of blood of the arterial and venous systems. The reason for disorder in the nutrition of a node can be various dystrophic processes in the myomatosic nodes (hypostasis, necrosis, hemorrhages, hyaline degeneration) which can develop as a result of ischemia, venous congestion, multiple blood clots in the intermuscular nodes of the tumour.

Coagulative and liquefactive types of necrosis of the uterus are distinguished. During coagulative necrosis a gradual wrinkling of the areas of necrotizing tissue occurs, thus original cavernosic cavities with the remains of necrotic tissue are formed. During liquefactive necrosis a softening and damp necrosis of tissue is observed with subsequent formation of cyst-like cavities. More often tumours, located intramural, are exposed to so-called red necrosis.

Macroscopically these tumours are colored red or brownish red, have a soft consistency, microscopically – dilated veins and their thrombosis. Reason: an increase in the tone of the surrounding node of the myometrium with subsequent development of a disorder in the blood circulation in the tumour's capsule and on the periphery. Infections, which penetrate into the node by hematogenous or lymphogenous way, often join aseptic necrosis.

The clinic for disorder of nutrition of nodes depends on the degree of disorder of blood supply of the node.

Necrosis of uterine myoma is accompanied by sharp pain in the stomach, tension of anterior abdomen wall, possibly an increase in temperature and leukocytosis.

During bimanual examination, the presence of myomatous nodes in the uterus, one of which is acutely painful during palpation, is determined.

An ultrasound makes revealing hard-to-access nodes easier. Laparoscopy is used to specify the diagnosis.

Treatment - operative. In some cases conservative treatment is acceptable: rheological active means (rheopolyglucin, trental), spasmolytics (papaverine, no-shpa) in combination with antibacterial and desensitizing means.

Methodical development of a practical lesson. «Health care», master's degree in the specialty "Medicine". Discipline "Obstetrics and Gynecology"

Pelviperitonitis and peritonitis - acute inflammation of the abdomen.

Reasons: fusion of the wall of pyosalpinx, purulent tubo-ovarian formations;

- various gynecologic operations;
- criminal abortions, including perforation of the uterus;
- necrosis of tumours of the ovary.

Depending on the extent of the inflammatory process, the following forms of peritonitis are distinguished:

- 1. Local (limited and unlimited).
- 2. Widespread (diffusive and generalized).

Pelviperitonitis can be the result of widespread infection on the peritoneum of the small pelvis during serous and purulent salpingitis, always is accompanied by the development of pyosalpinx, pyo-ovarium and tubo-ovarian abscesses.

Types: serous, fibrinous, purulent.

Clinic of the acute stage of pelviperitonitis: pain in the lower stomach, high temperature, nausea, sometimes - vomiting. During objective examination: rapid pulse which surpasses the temperature reaction. The tongue remains moist, sometimes it is covered with a white film. The stomach is bloated in the lower sections, also tension of the muscles of the abdominal wall, positive symptoms of irritation of the abdomen. Intestinal peristalsis is sluggish; the abdomen wall takes part in respiration. Bimanual examination is difficult because of the sharp pain and tension of the lower sections of the stomach. Intense pain occurs with the slightest shift of the cervix uteri. Sometimes the vaginal vaults flatten or overhang, which specifies the presence of exudation in the small pelvis.

For pelvioperitonitis, the clinical blood analysis should be repeatedly done during the day. Moderate leukocytosis, not so sharp shift in the leukocytic formula to the left, small decrease in the quantity of lymphocytes is characteristic for pelvioperitonitis.

In unclear cases, laparoscopy is conducted.

Treatment of pelvioperitonitis is, as a rule, conservative.

Methodical development of a practical lesson. «Health care», master's degree in the specialty "Medicine". Discipline "Obstetrics and Gynecology"

Rest, high-grade bland diet. On the lower stomach - periodic application of a bubble with ice. Antibacterial therapy. Disintoxication (infusion-transfusion therapy). Desensitizing, nonspecific anti-inflammatory anesthetics, vitamins. Sessions of ultra-violet irradiation of the blood are advisable.

Pelvioperitonitis, which proceeds on the background of pyosalpinx, pyo-ovarium and tubo-ovarian abscess, demands surgical treatment.

Widespread peritonitis is characterized by the early occurring of endogenous intoxication.

Classification of peritonitis by K.S. Simonyan:

I phase - reactive; II phase - toxic; III phase - terminal.

Clinic: pain in the stomach, protective tension of the muscles of the abdominal wall, positive symptoms of irritation of the abdomen, persistent intestinal paresis.

High fever, superficial rapid breath, vomiting, restless behavior and euphoria, tachycardia, cold sweat. Expressed leukocytosis with shift of the leukocytic formula to the left and toxic granular neutrophils, an increase in the level of alkaline phosphatase, sharp decrease in the number of trombocytes.

Treatment in 3 stages: preoperative preparation, operative intervention, intensive therapy during the postoperative period.

Preoperative preparation: decompression of the stomach, subclavian vein catheterization (infusion therapy, directed on the liquidation of hypovolemia and metabolic acidosis, correction of hydrologic, electrolytic and albuminous balance, detoxication of the organism), introduction of cardiac preparations, adequate oxygenation, intravascular introduction of antibiotics at their maximum dosage.

The volume of operative intervention is strictly individual, special requirements – complete removal of the center of infection with subsequent drainage of the abdominal cavity.

The duration of infusion therapy in the postoperative period should pursue the following purposes:

• Liquidation of hypovolemia by the introduction of colloidal solutions and albuminous preparations;

Methodical development of a practical lesson. «Health care», master's degree in the specialty "Medicine". Discipline "Obstetrics and Gynecology"

- Compensate for the loss of chlorides and potassium;
- Correction of acidosis;
- Provide the energy needs of the organism;
- Antienzyme and anti-coagulant therapy;
- Provide forced diuresis;
- Fight infection by using antibiotics with a wide spectrum of action;

• Prophylaxis and treatment of functional insufficiency of the cardiovascular system;

• Prophylaxis and liquidation of hypovitaminosis.

Restoring the motor-evacuational functions of the stomach and intestines has great value. Sessions of ultraviolet radiation. Hyperbaric oxygenation. Extracorporal haemosorption.

Traumatic damage of genitalia. Clinics, diagnostics, management tactics.

Emergency aid.

Female genital mutilation - a group of pathological conditions in which there is damage to the reproductive organs of women.

Traumatic injuries in gynecology often require emergency medical care. Injuries genitals, occurring after injury, surgery, abortion or sexual intercourse, observed in 0.5% of patients with gynecological.

They are classified as follows:

- breaks during sexual intercourse;
- damage caused by foreign bodies in the genital tract;

- injury of the external genitalia and vagina domestic and industrial nature, caused by a sharp object;

- beats genitals, crushing;
- chopped, sliced and gunshot wounds to the genitals
- damage due to medical practice.

Methodical development of a practical lesson. «Health care», master's degree in the specialty "Medicine". Discipline "Obstetrics and Gynecology"

Regardless of the cause of damage to determine its volume requires careful examination in the hospital, which includes in addition to the primary inspection special methods (rectoscopy, cystoscopy, x-ray, ultrasound and ultrasonarnoe study and others.).

As a result of injury, blunt force trauma often formed a hematoma, which is associated with a mechanical action on the vessel wall and its rupture. Hematoma in the form of blue-purple formations are usually easily diagnosed by simple visual inspection. With the external genitalia, they move on to the perineum, okolovlagalischnoy distributed in tissue and are so significant that accompanied the development of acute anemia in the patient. For large hematomas marked swelling, severe pain and deformation of the vulva. If the hematoma is infected, the fever, chills appears.

Treatment of hematoma is reduced to conservative expectant management. Usually recommend bed rest, ice region hematoma, vitamin K, F, G, calcium chloride. If the hematoma is growing, the patient develops severe anemia, we recommend opening a blood tumor, removal of blood clots, bleeding vessel ligation. The cavity is tightly sutured or left to drain, if there is a risk of infection hematoma (damage and cracks in the external genitalia). Festering hematoma is opened, it is drained cavity.

The most dangerous ruptures vessels and tissues in the clitoris, as marked with massive parenchymal hemorrhage. Therefore, aid for them should be given as early as possible.

As a result of the fall on a sharp object or blow horns of an animal are observed not only breaks the perineum, vagina, and perforation of the vaults, damage to the bladder, rectum.

The correct diagnosis facilitates inspection in the mirror, bimanual examination, symptoms. Treatment of vaginal rupture, perineum, rectum is suturing them. If parauterine okolovlagalischnoy tissue or a hematoma, it should not be tightly sew up the gap, especially after the break has been more than 12 hours, you need to put in the wound graduates.

When sexual intercourse is also sometimes observed traumatic injuries of external and internal genital organs. Such injuries are more common in women in old age, with the stenosis genitals after an inflammatory diseases, infantilism, with rough sexual intercourse (intoxicated), the wrong position of women and the large size of

Methodical development of a practical lesson. «Health care», master's degree in the specialty "Medicine". Discipline "Obstetrics and Gynecology"

the penis. Significant destruction of the vagina, tears vaults, penetrating into the abdominal cavity, rectum injury occur when the rape of minors, often there is a lot of bleeding. Such gaps are sutured. If more than 6 hours after injury, the seams do not overlap, the wounds heal by secondary intention.

Relatively frequently observed injuries when administered to women in the reproductive tract foreign bodies with criminal abortion and masturbation.

With the introduction of sharp objects into the vagina or cervix are often observed damage to the body of the uterus. Penetration small items into the uterine cavity or abdominal cavity is diagnosed by radiography, sometimes finger examination of the uterine cavity. Depending on the clinical picture and the location of the foreign body removed by vaginal or laparotomy.

We must not forget that many injuries occur on the genitals street, industrial premises and can be infected. Therefore it is necessary to provide a thorough treatment of wounds and prevention of tetanus.

The diverse nature of injuries and complaints, many variations of the disease depending on age, constitution and other factors require individual medical tactics. Knowledge of generally accepted tactical decisions allows the doctor ambulance to the hospital stage start urgent measures, which can then be continued in the hospital.

Preoperative preparation and postoperative care of gynecologic patients.

In the presence of chronic extragenital diseases (hypertension, ischemic heart disease, rheumatism, liver disease) the question of the operation time after the treatment is decided together with the appropriate specialist. It turns allergic history with compulsory specification of medicines and foods to which patients have a reaction.

Before elective surgery is required to perform:

- General blood and urine analysis;
- Bacterioscopic and bacteriological examination of discharge from the genital tract;
- Cytology smear from the cervix and its canal;
- Determination of blood group and Rh factor;

Methodical development of a practical lesson. «Health care», master's degree in the specialty "Medicine". Discipline "Obstetrics and Gynecology"

- Biochemical analysis of blood (total protein, bilirubin, urea, residual nitrogen, glucose, electrolytes);

- A blood test for HIV, the Australian antigen;

- Coagulation;

- Measurement of blood pressure, holding electrocardiogram and chest X-ray.

- According to the testimony of additional studies (ultrasonography, hysteroscopy, colposcopy, hysterosalpingography, endometrial biopsy, curettage of the uterus, hormonal studies, lymphography, CT scans, etc.).

In preparation for vaginal operations for patients with vaginitis, III-IV degree of vaginal purity performed anti-inflammatory therapy. In cases vaginal prolapse is treated with hydrogen peroxide and then introduced into the uterus and reduce a swabs soaked sintomitsinovoy emulsion. In the presence of trophic ulcers, and other pseudo-lesions on the cervix and vaginal walls carry extended colposcopy with biopsy and subsequent histological examination. Depending on the data to decide whether the amount of the transaction.

Preparing the patient for emergency surgery (intra-abdominal bleeding, cyst torsion legs, etc..) Is minimized. In urgent procedure and determine the blood group is Rh perform common blood and urine tests determine blood glucose, coagulation, carried out research on the total blood protein. Wash the stomach or its contents removed with a probe, carry enema. In case of violation of ectopic pregnancy, accompanied by heavy bleeding, enema is contraindicated (possibility of increased bleeding). The patient was in a state of hemorrhagic shock with a reception transported to the operating room, where at the same time embarking on transfusion (after determination of blood group and Rh factor) and laparotomy.

Patients with a tubo-ovarian inflammatory formations in preparation for the operation shows the infusion therapy. Preoperative preparation of patients over the age of 50 years, mainly directed at improving the function of the cardiovascular system.

In patients with uterine myoma often develop iron deficiency anemia, therefore as a pre-designate of oral iron supplements for 1-2 months to restore the level of hemoglobin. If indications for emergency surgery and the presence of severe anemia (even without hemodynamic instability), necessary to conduct blood transfusions.

Methodical development of a practical lesson. «Health care», master's degree in the specialty "Medicine". Discipline "Obstetrics and Gynecology"

In the presence of inflammatory diseases of the veins (phlebitis, thrombophlebitis) in pre- and post-operative period, shows the use of direct-acting anticoagulants (heparin, fraxiparine, Fragmin, kaltsiparin). For 2-3 days before the operation was stopped anticoagulant therapy. In cases of varicose veins show their compression elastic stockings or bandages.

When deciding on the time of the operation, you need to take into account the phase of the menstrual cycle. Surgery (except for hysteroscopy, curettage of the uterus) is not indicated for 2-3 days before and during menstruation due to the physiological increase in this period of bleeding tissue of the pelvic organs. Elective surgery it is advisable to appoint during the first phase of the menstrual cycle.

During preparation for surgery patients should receive food with high energy value, with little fiber. For 14-16 hours before the operation is stopped eating (one day before the operation: a light lunch - a thin soup, broth, in the evening - sweet tea). In the evening and in the morning before the operation is carried out a cleansing enema for the prevention of postoperative flatulence and intestinal paresis, conduct sanitary treatment (hygienic shower).

Before the surgery, the patient's medication runs preparation for the elimination of mental stress, as well as the normalization of sleep (sibazon - 0.01 g, nozepam - 0.01 g, elenium - 0,005 g; antihistamines: diphenhydramine - at 0.01-0.02 g, suprastin - 0,025 g, tavegil - 0.01 g). For 30-40 minutes before the operation is carried out premedication: introducing anticholinergics (atropine - 0.5 mg, metacin 0.5-0.8 mg); narcotic analgesics (promedol - 20 mg, fentanyl - 0.1 mg); antihistamines (diphenhydramine - 20 mg).

Immediately prior to surgery catheter urine output or enter an indwelling catheter for the duration of the operation, so full bladder can hurt at the opening of the abdominal cavity and cause injury pubic mirror during operation. On the day of surgery the vagina is treated with alcohol, dioxidine. When performing combined endotracheal anesthesia with muscle relaxants and mechanical ventilation (ALV) is used more often gynecological surgery.

Keeping the postoperative period aimed at the prevention and timely detection of possible complications.

Methodical development of a practical lesson. «Health care», master's degree in the specialty "Medicine". Discipline "Obstetrics and Gynecology"

In the recovery room the patient is transferred only after restoring them adequate breathing, consciousness, muscle tone, reflex activity, normalization of hemodynamics. In the case of the need to maintain ventilation, as well as in cases of severe state of patients transferred to the intensive care unit.

In the postoperative management of patients should take into account their age, physical illness, the volume of surgery, complications during surgery. Critical is the first 48-72 hours after surgery.

The patient was transferred to a pre-warmed soft bed. During the first 6 hours after surgery hourly measure blood pressure, pulse and breathing, a condition dressings, vaginal discharge, observe the symptoms of internal and external bleeding, for emptying the bladder.

When abdominal surgeries immediately after surgery on postoperative wound site for 3-4 hours put cargo for hemostasis and sparing the anterior abdominal wall by vomiting or coughing. For additional hemostasis, reducing postoperative wound edema, analgesia dosage appropriate to apply a local hypothermia (cold to the area of the surgical wound for 30 minutes in 1.5-2 hours for the first two days).

Doing early postoperative period provides adequate anesthesia, maintenance of normal respiratory, infusion and antibiotic therapy if indicated, prevention of bleeding and thromboembolism, elimination of postoperative complications. Pain after surgery negatively affects the postoperative period. Analgesics administered for anesthesia, if necessary every 4-6 hours after surgery (promedol, Tramal, tramadol, renalgan, Baralginum etc.). Adequate anesthesia allows the patient to breathe deeply, to carry out adequate ventilation. 2-3 th day of the administration of analgesics, if possible, to limit a single injection daily (at night).

By the end of the first day the patient should be rotated to the side, bend the legs, take deep breaths, breathing exercises recommended 6-8 hours after surgery to prevent pneumonia. To prevent thromboembolic complications, it is recommended to get up early to bed in the presence of a doctor or nurse (unless contraindicated).

In order to prevent pulmonary complications (postoperative pneumonia) are shown, if necessary oxygen therapy, drainage status, stimulation of coughing; mucolytics should be taken, put the banks sector and mustard on the chest (morning, evening). Keep an eye on hygiene patients (sanitation and toilet mouth, external genitalia, hygiene wiping bedsore prevention).

Methodical development of a practical lesson. «Health care», master's degree in the specialty "Medicine". Discipline "Obstetrics and Gynecology"

During the postoperative period, carefully observe the general condition of the patient (body temperature, blood pressure, pulse rate, respiration), postoperative wound secretions from the drains and catheters, timely emptying of the bladder and bowel. Carefully conducted palpation of the abdomen to detect the presence or absence of signs of peritoneal irritation, the state of the intestines. Carry out laboratory control of the state of basic life functions.

In the first hours after the operation the patient is moistened her lips with a damp cloth, on the second day of drinking fluids are not limited to (1.5-2 liters). Recommend boiled water or tea without sugar with lemon, rosehip infusion without sugar, alkaline mineral water without gas.

Infusion-transfusion therapy is carried out during the first days after the operation (of 2 -2.5 liters) in the future - if indicated for the correction of hemodynamic disturbances, bcc recovery, normalization of blood rheology and microcirculation, electrolyte balance and acid-base balance (blood , plasma, albumin colloid and crystalloid solutions - Ringer's solution, Locke-Ringer's solution, isotonic sodium chloride solution, 5% glucose solution laktasol, 4% potassium chloride solution - 30-40 ml / kg body weight).

The nature and volume of infusion therapy should be subject to major diseases, especially surgery, and the patient's age. Daily diuresis thus should be 1200-1400 ml. The amount of fluid injected is reduced by half if the patient prior to surgery showed signs of cardiac failure. Antibiotic treatment was administered in the presence of inflammation in the pelvic cavity, after traumatic operations, in the case of repeated operations at high risk.

In order to maintain renal function administered 20-40% glucose solution, osmotic diuretics (mannitol), saluretiki (Lasix); liver function - Essentiale, kokarboksilazu; cardiovascular system - strofantin, Korglikon, aminophylline, papaverine.

The complex prevention of thromboembolic complications in the early post operative period shows an application, direct anticoagulants (heparin 5000 IU under the skin of the anterior abdominal wall three times a day, or low molecular weight heparin (fraxiparine, Fragmin, Clexane)

intestinal condition returned to normal, usually 2-3 days after the operation (normalization of peristalsis, independent carminative, on the 3rd day carried out a cleansing or hypertonic (100 mL) enema.

Methodical development of a practical lesson. «Health care», master's degree in the specialty "Medicine". Discipline "Obstetrics and Gynecology"

Meals patients can begin after the start of operation of the intestine, as a rule, from the 2nd day after the operation (yogurt, low-fat chicken broth, fish soup, tomato juice, tea). On the third day, you can add boiled chicken, egg, cooked boiled, pureed soup, baked apples, crackers. In the future, patients gradually expand the menu to normal.

Every day or every other day change the bandage on his stomach, and the seams are treated with an alcohol, an iodine solution, an alcoholic solution of brilliant green. On days 7-8 remove sutures and conduct gynecological examination. Obese joints gradually removed through a single, final - on 9-10 day.

After vaginal surgery the patient must observe the following rules: bed rest, analgesics and antibiotics (if indicated), breathing exercises, regulation of bowel and bladder functions.

After the operation is applied cold to the perineum for 1-1.5 hours. In the case of a cold swelling joints used in the first few days after surgery for 30 minutes with an interval of 1,5-2 hours. The first day after the operation the patient is expedient to keep the attention of the feet. From the second day allow them to bend at the knees, but not to breed: back in bed on his side with pivot feet. Getting up is possible from the prone position. Vaginal swab was removed after 6-8 hours after surgery.

After surgery on the muscles of the pelvic floor defecation delayed for 3-5 days. Delay chair guts provided a thorough cleansing before surgery liquid diet during the first 5 days after it (unsweetened tea, ear, juices). On the 6th day diet gradually expand (baked mashed fruit, vegetables, pudding, yogurt one day); food must be low in fiber. Before removing the sutures inside the prescribed 30 grams of glycerin. During operations with plastic bladder is advisable to apply a thin flexible indwelling catheter, which is introduced for 3-4 days. The bladder through a catheter washed once a day with a solution furatsilina. This reduces the frequency of postoperative cystitis, post-operative bladder atony.

Caring for postoperative wound in the perineum performed open-pit twice a day. The vagina is washed with 0.1% potassium permanganate solution furatsilina. In at least three months after surgery patients do not allow to lift weights (3 kg). Patients are exempt from heavy physical work up to 6 months.

Methodical development of a practical lesson. «Health care», master's degree in the specialty "Medicine". Discipline "Obstetrics and Gynecology"

Anesthesia during gynecological operations.

As in other sections of surgery, anesthesia in gynecology is four varieties: general anesthesia (or narcosis), sedation, regional anesthesia, local anesthesia.

Small surgical procedures in gynecology are performed under local anesthesia, sedation or intravenous anesthesia. Large operations in gynecology is performed under general anesthesia (general anesthesia) or by regional types of anesthesia (spinal, epidural anesthesia).

Vacuum (vacuum aspiration), taking aspirate from the cavity puncture the posterior fornix, uterine curettage (separate diagnostic curettage) or abortion is most often performed under local anesthesia or intravenous anesthesia.

If local anesthesia is performed cervical infiltration of tissues around (paracervical anesthesia) local anesthetic that blocks the consequence of pain during manipulation of the cervix. When performing local anesthesia in gynecology of local anesthetics are used more often than others lidocaine, procaine or ultrakain.

Given the risk that some of the local anesthetic solution into the blood vessel when performing gynecological local anesthetic (in particular paracervical anesthesia) some gynecologists not apply this kind of anesthetic and minor surgery performed as described above under some sedation or no analgesia. Gynecologists do not possess the skills of classical sedation (this requires special knowledge), so the phrase "some sedation" and used the word "some". This is a sedation or intramuscular tranquilizer (diazepam), several of cleaning anxiety, but no pain, or intramuscular injection of analgesic (ketorolac, diclofenac, Promedolum), providing a slight decrease in pain during surgery.

As used in gynecology phlebonarcosis a variation on the general anesthesia, the patient is falling asleep and experiences no pain during surgery.

A large volume gynecologic surgery (laparoscopy, on the uterus and its appendages surgery, treatment of urinary incontinence, etc.) Is most often performed under general anesthesia, at least under regional anesthesia. Conducting in gynecology these types of anesthesia does not differ from their conduct in other surgical specialties, so a detailed description can be found in sections: general anesthesia,

Methodical development of a practical lesson. «Health care», master's degree in the specialty "Medicine". Discipline "Obstetrics and Gynecology"

regional anesthesia. The choice of anesthesia will be determined by the particular kind of operation and the condition of the patient.

Each year, more than 30 million surgical procedures are per- ormed. During these, nearly 1 million patients su er a postoperative complication (Mangano, 2004). As surgeons, gynecologists assume responsibility or assessing a patient's clinical status to identi y modi able risk actors and prevent perioperative morbidity. However, clinicians should also be prepared to diagnose and manage such complications i they arise.

## **3.3. Requirements for the results of work.**

1. Classify and analyze clinical picture of precancerous and malignant diseases of female genital system.

2. Make plan of examination using modern methods of diagnostics, analyze data of laboratory and instrumental tests in precancerous and malignant diseases of female genitals and state preliminary diagnosis;

3. Conduct differential diagnostics of precancerous and malignant diseases of female genital system;

4. Determine tactics of patient management(principles of operative interventions and conservative treatment, rehabilitation measures) in precancerous and malignant diseases of female genital system;

5. Conduct prophylaxis of precancerous and malignant diseases of female genital system;

6. Perform necessary medical manipulations.

### **3.4.** Control materials for the final stage of the class: tasks, tests, etc.

Tests

1. A woman complains of sudden pain in the abdomen, which irradiye the anus, nausea, dizziness, dark bloody discharge from the genital tract during the week, delay menstruation for 4 weeks. Symptoms of peritoneal irritation positive. In the mirror, cyanosis of the mucous membranes of the vagina and cervix. In bimanual

Methodical development of a practical lesson. «Health care», master's degree in the specialty "Medicine". Discipline "Obstetrics and Gynecology"

study notes symptom of "uterus floating" pain and bulging rear and right side of the vaults of the vagina. The most likely diagnosis?

- A. Acute appendicitis.
- B. apoplexy ovary.
- S. acute right-adnexitis.
- D. tilting legs ovarian tumor.
- + E. ectopic pregnancy.

2. The 24-year-old woman complains of bloody spotting, vaginal discharge and pain in the right iliac region. In the history of irregular menstrual cycle. Last menstruation 7 weeks ago. During bimanual examination the uterus is not enlarged, painless. Title chorionic gonadotropin 1000. Tactics doctor?

- A. diagnostic laparoscopy.
- B. Ultrasound pelvic organs.
- C. Kuldoskopiya.
- + D. Re-definition CG 24 hours.
  - E. Repeated studies of hCG in a week.

3. Woman '17 worried about sharp pain below the abdomen. Notes the delay menstruation for 2 weeks. Sex life during the year. Guarded pregnancy interrupted sexual intercourse. Objectively: pale. 36,60S body temperature, blood pressure 95/60 mm Hg, pulse 90 beats / min. If bimanual examination is defined slightly enlarged uterus, cervix tours painful appendages expressly konturuyutsya, rear arches vypnute. Discharge from the genital tract dark bloody miserable. The most informative method:

- A. Ultrasound of the pelvic organs.
- B. Complete blood.

Methodical development of a practical lesson. «Health care», master's degree in the specialty "Medicine". Discipline "Obstetrics and Gynecology"

C. puncture the abdominal cavity through the posterior vaginal vault.

- D. colposcopy.
- + E. Laparoscopy.

4. A woman worries acute abdominal pain, fever up to 38,0 ° C. Knows the presence of uterine fibroids 3 years. Symptoms of peritoneal irritation positive in the lower abdomen. WBC 10.2 T / L, erythrocyte sedimentation rate 28 mm / h. In bimanual study of uterine body increased to 8-9 weeks of pregnancy, on the front surface - dramatically painful myoma node size 4x4 cm, uterine appendages not changed. Ultrasound confirms that subserous myoma node. What is the most likely diagnosis?

- A. Internal endometriosis.
- B. tuboovarialnogo tumor.
- + C. Necrosis myoma node.
  - D. Acute adnexitis.
  - E. perimetrity.

5. A woman complaining of abdominal pain that iradiyuye the anus, dizziness, occurring after coitus. In the history of inflammation of the uterus 7 years. 15-day menstrual cycle. Skin pale, soft abdomen, painful, positive symptoms of peritoneal irritation. Pulse 110 beats / min. If bimanual examination defined by increased spherical, painful right ovary, painful back and right lateral vaginal vault. No bleeding. Probable cause "acute abdomen":

- A. ovarian tumors with malnutrition.
- + B apoplexy ovary.
  - C. ectopic pregnancy, which was interrupted by the type of tubal abortion.
  - D. What interrupted the type of pipe rupture, ectopic pregnancy.
  - E. exacerbation of chronic adnexitis.

Methodical development of a practical lesson. «Health care», master's degree in the specialty "Medicine". Discipline "Obstetrics and Gynecology"

6. Gynecology department received ill '20 complaining of a sharp pain in the abdomen after exercise. Last menstruation 2 weeks ago. When vaginal examination the uterus is not enlarged, painless, left appendage sharply painful on palpation, making it difficult to study. Symptom Promtova positive. The rear arches looming, painful. Pulse 96 beats / min., BP 100/60 mmHg What kind of pathology it is?

- A. Acute left-sided salpingo.
- + B. apoplexy left ovary.
  - C. piosalpinks left.
  - D. violated left-sided tubal pregnancy.
  - E. tumor of the left ovary.

7. Woman '26 delivered to the receiving department with complaints of sudden pain in the lower abdomen, weakness, loss of consciousness at home. Last menstruation 2 months ago. Hb 106 g / L, pulse 120 / min, blood pressure 80/50 mmHg Pain and symptoms of peritoneal irritation at the bottom right. What is the most likely diagnosis?

- A. apoplexy ovary.
- B. Torsion ovarian cyst legs.
- C. Acute appendicitis.
- D. Acute adnexitis.
- + E. impaired tubal pregnancy.

8. Gynecological hospital received a woman complaining of a sharp pain in the lower abdomen. A year ago at prophylactic examinations diagnosed tumor of the right ovary. From the operation refused. An examination of women Note the positive symptoms of peritoneal irritation. Bimanual - normal size uterus, painless,

Methodical development of a practical lesson. «Health care», master's degree in the specialty "Medicine". Discipline "Obstetrics and Gynecology"

right size is determined by the formation of up to 8 cm, sharply painful, dense, with clear contours. Possible diagnosis?

- + A. Torsion ovarian cyst legs
  - B. Ectopic Pregnancy
  - C. Acute right sided adnexitis
  - D. Rupture of ovarian cysts
  - E. pelvioperitonit

9. Patient '39 complaining of acute abdominal pain, vomiting, frequent urination. On examination, the abdomen swollen moderately positive symptom Schotkyna-Blumberg. Pulse 88 per minute, body temperature of 37  $^{\circ}$  C. If bimanual examination: uterine body tight, not increased, mobile, painless, and right in front of the formation of palpable uterus size 6x6 cm tuhoelastychnoyi consistency, sharply painful shear; left appendages are not defined; vault free; mucus. What is the most likely diagnosis?

A. Intestinal obstruction.

- B. Renal colic.
- C. apoplexy ovary.
- + D. torsion stem tumor of the ovary.
  - E. Acute inflammation of the uterus tuboovarialnogo form on the right.

10. Patient '28 addressed with complaints of intense pain in the lower abdomen, fever up to 39 ° C, and nausea. Ill after menstruation. Sex life outside of marriage. The abdomen is painful on palpation in the lower divisions. Symptom Schitkyna-Blumberg positive. In the study, the contours of the uterus and appendages are not clearly defined by the tension of the anterior abdominal wall. The rear arches sharply painful. Bold pus. What is the most likely diagnosis?

- A. Adenomyosis
- B. parametrit

Methodical development of a practical lesson. «Health care», master's degree in the specialty "Medicine". Discipline "Obstetrics and Gynecology"

- + C. pelvioperitonit
  - D. Appendicitis
  - E. Torsion ovarian cyst legs

#### B. Summing up

**Current control:** oral examination, testing, assessment of practical skills, solving situational clinical problems, assessment of activity in the classroom.

Criteria for current assessment on the practical lesson:

5	The student is fluent in the material, takes an active part in the discussion and solution of situational clinical problems, confidently demonstrates practical skills during the examination of a pregnant and interpretation of clinical, laboratory and instrumental studies, expresses his opinion on the topic, demonstrates clinical thinking.
4	The student is well versed in the material, participates in the discussion and solution of situational clinical problems, demonstrates practical skills during the examination of a pregnant and interpretation of clinical, laboratory and instrumental studies with some errors, expresses his opinion on the topic, demonstrates clinical thinking.
3	The student isn't well versed in material, insecurely participates in the discussion and solution of a situational clinical problem, demonstrates practical skills during the examination of a pregnant and interpretation of clinical, laboratory and instrumental studies with significant errors.
2	The student isn't versed in material at all, does not participate in the discussion and solution of the situational clinical problem, does not demonstrate practical skills during the examination of a pregnant and the interpretation of clinical, laboratory and instrumental studies.

Methodical development of a practical lesson. «Health care», master's degree in the specialty "Medicine". Discipline "Obstetrics and Gynecology"

#### **Recommended literature**

Basic:

- 1. Oxford Handbook of Obstetrics and Gynaecology by S. Collins , S. Arulkumaran , K. Hayes , S. Jackson , L. Impey, Oxford University Press, 3rd Edition, 2019
- 2. Handbook of Gynecology Shoupe, MD, MBA, Donna (Ed.), Springer, 2017
- 3. Oxford Handbook of Obstetrics and Gynaecology by S. Collins , S. Arulkumaran , K. Hayes , S. Jackson , L. Impey, Oxford University Press, 3rd Edition, 2019
- Gunner Goggles Obstetrics and Gynecology, Edition 1, By Hao-Hua Wu, Leo Wang, 06 Oct 2018
- 5. Beckmann and Ling's Obstetrics and Gynecology, Eighth, North American Edition, Dr.Robert Casanova, May 3, 2018 Beckmann and Ling's Obstetrics and Gynecology, Eighth, North American Edition, Dr.Robert Casanova, May 3, 2018

The Linde's operative gynecology - John A.Ro

Methodical development of a practical lesson. «Health care», master's degree in the specialty "Medicine". Discipline "Obstetrics and Gynecology"