"Затверджено"	
на методичній нараді к	афедри акушерства,
гінекології та плануван	ія сім'ї
медичного інституту С	умДУ
протокол №	
від "	2021p.

### **Methodical development**

independent work of a student in the discipline "Obstetrics"

**Topic:** Operative obstetrics. Childbirth injuries.

Number of hours - 3.

**Objective:** to know the general concepts of surgical interventions in obstetrics, operations that preserve pregnancy, early termination of pregnancy, late termination of pregnancy, operations to prepare the birth canal, cesarean section, to determine the indications and contraindications for surgery; conditions for the operation; technique and stages of the operation, complications of cesarean section (intraoperative and postoperative), postoperative care in the early postoperative period, be able to recognize the risk of damage to perineal tissues, vagina, risk of uterine rupture, diagnose hematomas, urinary hematomas, urinary tract classify perineal and cervical ruptures according to the degree of spread, be able to provide emergency care at the risk of uterine rupture, be able to conduct a manual examination of the uterine cavity, know the techniques used in these nosologies, have an idea of tactics in case of sprains and strains pelvic joints, methods of rehabilitation of women in the postpartum period.

The student must: master the techniques for predicting the risk of birth injuries; assessment of the perineum in the 2nd period of childbirth; determination of the condition of the scar on the uterus; recognition of clinical signs of threat of uterine rupture; recognition of clinical signs of uterine rupture; suturing at a perineal rupture of 1-2 degrees; blood loss assessments; assessment of the general condition of the mother and fetus; performing perineotomy, episiotomy.

#### Class organization:

Organizational moment	2% study time;
Motivation of the topic	3% study time;
Control of the initial level of knowledge	20% study time;
Independent work of student	35% study time;
Control of the final level of knowledge	20% study time;
Assessment of students' knowledge	15% study time;
Generalization of the teacher, homework	5% study time;

I. Testing: 20 tests.

#### II. Key issues:

- 1. What is the definition of "cesarean section"?
- 2. What are the main indications for cesarean section?
- 3. What are the conditions for performing a cesarean section?

- 4. What are the contraindications for cesarean section?
- 5. What types (methods) of abdominal cesarean section, their advantages and disadvantages?
- 6. What is the anesthetic support of the operation?
- 7. What is the preparation for cesarean section?
- 8. What are the stages of cesarean section?
- 9. What are the main complications of cesarean section?
- 10. What are the features of the postoperative period?
- 11. What are the models of obstetric forceps, their structure and mechanism of action?
- 12. What are the indications for the operation of obstetric forceps?
- 13. What are the conditions for the operation of obstetric forceps?
- 14. What are the stages of the operation of applying obstetric forceps?
- 15. What are the principles of applying obstetric forceps?
- 16. What complications are typical in the operation of obstetric forceps?
- 17. What are the methods of analgesia when applying obstetric forceps?
- 18. What is the structure and mechanism of action of the vacuum extractor?
- 19. What are the indications for the operation of vacuum extraction of the fetus?
- 20. What are the conditions for the operation of vacuum extraction?
- 21. What is the technique of vacuum extraction of the fetus?
- 22. What are the methods of anesthesia during the operation of vacuum extraction of the fetus?
- 23. What are the complications of the operation of vacuum extraction of the fetus?
- 24. What operations belong to the operations that prepare the birth canal?
- 25. What is the definition of "Amniotomy"?
- 26. What are the indications, conditions, preparation and methods of amniotomy?
- 27. What is the definition of "episiotomy" and "perineotomy"?
- 28. What are the indications and techniques of the operation episiotomy and perineotomy?
- 29. What is the definition of "fruit-destroying operations"?
- 30. What is the classification of fruit-destroying operations?
- 31. What are the conditions, indications and technique of craniotomy?
- 32. What are the main stages of craniotomy?
- 33. What are the conditions, analgesia, methods and complications of the operation decapitation?
- 34. What are the indications, conditions and methods of evisceration?
- 35. What are the indications, conditions and methods of spondylotomy surgery?

- 36. What are the indications, conditions and methods of cleidotomy surgery?
- 37. What are the risk factors for uterine rupture?
- 38. How are uterine ruptures classified?
- 39. What is the clinical picture characteristic of impending uterine rupture?
- 40. What is the clinical picture characteristic of a completed uterine rupture?
- 41. What are the tactics of management of pregnant women / parturients with uterine rupture, depending on the clinical stage of rupture?
- 42. What are the risk factors for rupture of the perineum, cervix, vagina?
- 43. How are ruptures of the perineum, cervix, vagina classified?
- 44. What are the diagnostic criteria for rupture of the perineum, cervix, vagina?
- 45. What are the tactics for rupture of the perineum, cervix, vagina?

# III. Practical experience:

- 1. Make a plan for examination of pregnant women before obstetric surgery.
- 2. Determine the indications and contraindications to obstetric surgery.
- 3. Select instruments and assist during obstetric operations.
- 4. Perform the operation of applying the original obstetric forceps on the phantom.
- 5. Perform the operation of vacuum extraction of the fetus on the phantom.
- 6. Identify clinical signs of impending uterine rupture.
- 7. Identify clinical signs of scar failure on the uterus.
- 8. To make algorithm of rendering of emergency care to the pregnant woman / woman in labor with a rupture of a uterus threatening and which has occurred.
- 9. Examine the birth canal in the early postpartum period with the help of vaginal mirrors.
- 10. Make a plan for postoperative observation and care of the mother.

## IV. Solving situational problems.

## Tasks for self-training and self-correction of the initial level of skills

1. Maternity S. 28 years old, the first urgent birth. The first period of childbirth lasted 4 hours, the powerful period lasted 30 minutes. A boy was born weighing 3800, height 52 cm, able to Apgar 9-10 points. W period of childbirth without features, the uterus is shortened, dense. There are bloody discharges from the birth canal, which appeared in the first period of childbirth. What does this clinical picture most likely indicate?

## A. Rupture of the cervix.

- B. Premature detachment of the placenta
- C. Placenta previa

- D. Rupture of the uterus occurred
- E. Hypotonic bleeding
- 2. The mother, 28 years old, was taken to the maternity ward with a full-term pregnancy, labor. In the anamnesis of 1 childbirth, 4 medical abortions. The position of the fetus is longitudinal, the main presentation. The size of the pelvis is 23-26-28-18 cm, Solovyov index 17 cm. The allowable weight of the fetus is 3900 g. The mother is worried, the contractions are painful, strong. Contraction ring at the level of the navel, the lower segment of the uterus is painful. Diagnosis: threat of uterine rupture. What are the medical tactics?

#### A. Cesarean section.

- B. Conservative childbirth.
- C. Obstetric forceps.
- D. Stimulation of labor.
- E. Vacuum extraction of the fetus
- 3. A 38-week-old woman complains of epigastric pain during hospitalization. Objectively: blood pressure on both arms 170/105 mm Hg Fetal heart rate 136 beats / min., Rhythmic. There is no labor, the water is intact. The most justified tactic.

## A. Cesarean delivery in an urgent manner.

- B. Initiate the stimulation of labor.
- C. Conduct controlled arterial hypotension.
- D. To carry out intensive complex therapy of gestosis.
- E. Carry out a laboratory assessment of liver and kidney function and perform hemodialysis.
- 4. Maternity in the second period of childbirth. Complaints of intermittent pain in the back of the head, forehead and epigastric region. There is swelling of the face, legs and genitals. Blood pressure on both hands 160/90. What are the next tactics?

# A. Obstetric forceps

- B. Cesarean section
- C. Imposition of forceps according to Wilt-Ivanov
- D. Fruit-destroying operation
- E. Stimulation of labor

5. Pregnant, gestation period 41-42 weeks. Longitudinal position of the fetus, the main presentation. The size of the pelvis 23-26-29-18, the circumference of the abdomen 102 cm, VDM 40, and the period of childbirth lasts 8 hours, departed amniotic fluid, contractions after 2-3 minutes for 35-40 seconds, the head of the fetus is pressed to the entrance to the small pelvis, contraction ring beveled to the navel, Vasten's sign is positive. Vaginal examination: full opening, head at the level of lin. terminalis., the amniotic sac is absent, a small umbilicus on the left side of the womb. Doctor's tactics?

#### A. Cesarean section

- B. Strengthening labor
- C. Fetus-destroying operation
- D. Further delivery per vias naturalis
- E. Obstetric forceps
- 6. A 25-year-old woman born again in the first period of childbirth with contractions of medium strength. This is the third pregnancy. History of cesarean section for clinically narrow pelvis and 1 artificial abortion. Suddenly, there was severe abdominal pain and weakness in the mother; Blood pressure dropped to 90/50 mm Hg. Moderate bloody discharge appeared from the vagina. The fetal heartbeat is not listened to. Childbirth has stopped. The most probable diagnosis:

## A. Rupture of the uterus

- B. Premature detachment of the normally located placenta
- C. Embolism of amniotic fluid
- D. Syndrome of the inferior vena cava
- E. Placenta previa
- 7. The mother was delivered to the maternity ward with strong contractions and the handle of the fetus that fell out of the vagina. The uterus is painful in the lower segment. The fetal heartbeat is listened to. At vaginal examination: the cervix is smoothed, the uterine eye is open up to 7 cm, the pricked shoulder and the handle of the fetus are palpated. What shall I do?

### A. Fetus-destroying operation

- B. Cesarean section
- C. Rotation of the fetus on the leg
- D. Episiotomy
- E. Obstetric forceps
- 8. An ambulance doctor was called to a woman 36 weeks pregnant. The first pregnancy ended with a caesarean section. Objectively: sharply pale, filiform pulse, blood pressure 80/40 mm Hg,

abdomen slightly swollen, painful in the lower parts, fetal heartbeat is not audible. From the genital tract - bright bloody discharge. What is the previous diagnosis?

- A. Detachment of the normally located placenta.
- B. Before the placenta lies.
- C. Rupture of the soft birth canal.

# **D.** Rupture of the uterus

- E. Rupture of the ovarian cyst.
- 9. The newborn, 34 years old, was admitted to the maternity hospital with a full-term pregnancy 4 hours after the start of labor with whole amniotic fluid. Abdominal circumference 112 cm, VDM 38 cm, uterine walls are tense, there is a sign of fluctuation, parts of the fetus are poorly palpated. The fetal heartbeat is muffled. Contractions are regular, satisfactory strength. At vaginal examination: the cervix is smoothed, the edges are thin, the opening is up to 6 cm, the amniotic sac is intact, tense, the anterior part the head, movable above the entrance to the pelvis. What are the tactics of childbirth?

## A. \* Amniotomy, to complete labor through the birth canal conservatively

- B. Cesarean section
- C. Obstetric sleep before amniotic fluid fusion
- D. Amniotomy followed by extraction of the fetus behind the pelvic end
- E. Arousal by intravenous oxytocin
- 10. In a woman in labor 30 years with manual removal of manure and examination of the uterus revealed a rupture of the cervix on the right with the transition to the lower segment. Blood loss reaches 1300 ml and continues. Doctor's tactics?

## A Uterine extirpation

- B. Supravaginal amputation of the uterus
- C. Uterine tamponade
- D. Tampon with ether in the posterior arch
- E. Baksheev or Tikinadze clamps

# **Recommended reading:**

- 1. Obstetrics and gynecology: textbook: in 2 books. Book 1 Obstetrics: Obstetrics / BM Ventskivsky, MO Shcherbina, VI Grishchenko [etc.]; 4th ed., Ed. К.: Медицина, 2020. 424 р.
- 2. Obstetrics and gynecology: textbook: in 2 books. Book 2 Gynecology / VB Ventskivsky, MO Shcherbyna, VI Grishchenko [etc.]; 3rd ed., Ed. К.: Медицина,

2020. - 376 p.

- 3. Workshop on obstetrics / II Bachynska K .: "Medicine", 2021. 104 p.
- 4. Workshop on phantom obstetrics / P. Yavirsky, V. Shatylo, T. Yavirska K .: "Medicine", 2017-144 p.
- 5. Workshop on gynecology / A.M. Vavilova K .: "Medicine", 2019. 96 p.
- 6. Clinical obstetrics and gynecology / A. Brian, Magovan, Philip Ouden, Andrew

Thomson; scientific editor of the translation by M. Shcherbyna - K .: "Medicine", 2021. - 512 p.

7. Oxford Texbook of Obstetrics and Gynecology / Sabaratram Arulkumaran, Wiliam Ledgar, Lynette Denny, Stergious Doumouchtsis - Oxford University Press, 2020, 928 p.

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