METHODOLOGICAL MANUAL FOR PRACTICAL CLASSES IN OBSTETRICS FOR STUDENTS

N. I. Pirogov Russian National Research Medical University

DEPARTMENT OF OBSTETRICS AND GYNAECOLOGY
FACULTY OF MEDICINE

METHODOLOGICAL MANUAL FOR PRACTICAL CLASSES IN OBSTETRICS FOR STUDENTS

Educational and methodical manual

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Кафедра акушерства и гинекологии

МЕТОДИЧЕСКОЕ ПОСОБИЕ К ПРАКТИЧЕСКИМ ЗАНЯТИЯМ ПО АКУШЕРСТВУ ДЛЯ СТУДЕНТОВ

Учебно-методическое пособие

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The educational and methodological manual, developed by the staff of the Department of Obstetrics and Gynecology of the Faculty of Medicine, is compiled on the basis of exemplary and working programs in the discipline "Obstetrics and Gynecology", providing for the training of general practitioners who have certain knowledge, skills and abilities in the field of obstetrics and gynecology and taking into account further training and professional activities in the specialty "General Medicine".

The purpose of obstetrics classes in the fourth year is to study the basic clinical and physiological characteristics of the female reproductive system, the processes occurring in a woman's body with a physiological pregnancy; the process of normal childbirth, the physiological postpartum period; basic and additional methods of examination of pregnant women, women in labor and postpartum, principles of treatment and emergency care. Students must master the principles of examining patients, learn to recognize, based on the study of anamnesis and objective examination, physiological and pathological processes associated with reproductive function, promptly refer to a specialist and, if necessary, provide emergency obstetric care in a typical obstetric situation.

The manual presents a plan for the clinical history of childbirth, a list of basic and additional literature on the specialty. The manual is recommended for the 4th–5th year students of the medical faculty of medical institutions of higher professional education.

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Методическое пособие к практическим занятиям
М54 **по акушерству для студентов :** учебно-методическое пособие / Ю. Е. Доброхотова, И. Ю. Ильина, Л. А. Озолиня [и др.]. – Чебоксары : Среда, 2026. – 100 с.

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Учебно-методическое пособие, разработанное сотрудниками кафедры акушерства и гинекологии медицинского факультета, составлено на основе примерных и рабочих программ по дисциплине «Акушерство и гинекология», предусматривающих подготовку врачей общей практики, обладающих определенными знаниями, навыками и умениями в данной области акушерства и гинекологии и с учетом дальнейшего обучения и профессиональной деятельности по специальности «Общая медицина».

Целью занятий по акушерству на четвертом курсе является изучение основных клинико-физиологических особенностей женской репродуктивной системы, процессов, происходящих в организме женщины при физиологической беременности; процесса нормальных родов, физиологического послеродового периода; основных и дополнительных методов обследования беременных женщин, женщин в роды и послеродовой период, принципы лечения и неотложной помощи. Студенты должны овладеть принципами обследования пациенток, научиться распознавать на основе изучения анамнеза и объективного осмотра физиологические и патологические процессы, связанные с репродуктивной функцией, своевременно обращаться к специалисту и при необходимости оказывать неотложную помощь в типичной акушерской ситуации.

В пособии представлен план ведения истории родов, список основной и дополнительной литературы по специальности. Пособие рекомендуется студентам 4–5 курсов лечебного факультета медицинских учреждений высшего профессионального образования.

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Topic 1

(4 hours)

ORGANIZATION OF WORK OF AN OBSTETRIC HOSPITAL

Motivation: State policies aimed at stimulating childbearing, increased healthcare funding and the construction of modern perinatal centers, and the allocation of maternity capital by the state to a certain extent contributed to the solution of demographic problems in Russia and the provision of high-tech medical care to mothers and children. A general practitioner needs to know the organization of the obstetric system in the Russian Federation, the purpose of the main units of an obstetric hospital, the basic principles of providing medical care to pregnant women, women in labor and postpartum women. The knowledge and skills acquired in the process of studying this topic will help the doctor to correctly understand the organization of the obstetric system, the basic principles of the sanitary and epidemiological regime in obstetric hospitals, and to master the algorithms for managing pregnant women, women in labor and postpartum at all stages.

Purpose of the lesson.

1. Systematize knowledge, acquired from the lecture material, in accordance with the stated requirements for the volume and level of understanding the contents of the section.
2. Understand the stages of continuity of medical care for pregnant women, women in labor, postpartum women and newborns.
3. Familiarize yourself with the organization of the obstetric hospital, the equipment of its structural units, and the basic principles of the sanitary and epidemiological regime.
4. Study the peculiarities of admitting pregnant women and women in labor to the maternity ward, the method of collecting anamnesis, and to learn the basic principles of recording a birth history.

Lesson objectives.

1. Study of the theoretical foundations of the organization of the obstetric system in the Russian Federation.
2. Familiarize yourself with the organization of the work of an obstetric hospital, the equipment of its structural units, and the basic principles of the sanitary and epidemiological regime.

3. Familiarize yourself with the collection of anamnesis from pregnant women, women in labor and postpartum, with the registration of birth history.

Topic issues covered.

1. Problems of reproductive health of women in the Russian Federation and ways to solve them (demographic problems, increasing incidence of chronic and recurrent diseases and sexually transmitted diseases, high teenage morbidity, infertility, miscarriage, maternal and perinatal morbidity and mortality, etc.).

2. The main institutions of the obstetric system, the population of patients served by these institutions. Principles and tasks of an antenatal clinic. Obstetric care in day hospitals. Types of obstetric hospitals (maternity hospitals, maternity wards of multidisciplinary hospitals, perinatal centers).

3. Structural units of an obstetric hospital and the features of its work (admission unit; maternity department with an operating unit; physiological obstetric postpartum department; department of pathology of pregnant women; observational obstetric department; department for newborns as part of physiological and observational obstetric departments; gynecological department).

4. Compliance with the sanitary and epidemiological regime in obstetric hospitals.

5. Issues of ethics and deontology in obstetrics.

6. The procedure for compiling a birth history, specifics the collection of anamnesis in obstetrics.

Questions for the lecture.

1. Problems of women's reproductive health in the Russian Federation and ways to solve them.

2. The main institutions of the obstetric system, the population of patients served by these institutions.

3. Principles and tasks of the antenatal clinic. Maternity consultation units. Basic principles of management of pregnant women, identification of risk groups, organization of prenatal screening. Issuance of sick leave, provision of maternity leave. Criteria for the quality of antenatal clinic work.

3. Organization of the work of a day hospital, types of obstetric care.

4. Obstetric hospitals (maternity hospitals, maternity departments of multidisciplinary hospitals, perinatal centers), structure of main depart-

ments. Main quality indicators of the work of an obstetric hospital. Maternal and perinatal morbidity and mortality, ways to reduce them. Septic morbidity, preventive measures.

5. Issues of ethics and deontology in obstetrics. Physiopsychoprophylactic preparation of pregnant women for childbirth.

Standard for mastering the topic.

After completing the lesson, the student should know:

1. Organization of the obstetric system in the Russian Federation.
2. The structure of an obstetric hospital, the organization of work of its main departments.
3. Indications for admission of pregnant women and women in labor to an obstetric hospital.
4. Indications for transfer of pregnant women, women in labor and postpartum to observational hospital department.
5. Indications for the transfer of newborns from a maternity hospital to an appropriate department of children's hospitals.
6. Sanitary and epidemiological regime in obstetric hospitals.
7. Methods for sterilizing instruments, dressings, linen, processing furniture and premises.
8. Organizational measures to identify sick people and bacteria carriers among staff, pregnant women, women in labor and postpartum women.
9. List of primary medical documentation.
10. Performance indicators of the obstetric hospital.
11. Legal and ethical standards in obstetrics.

The student must be able to:

1. Independently collect anamnesis from pregnant women and women in labor admitted to the hospital, fill out primary medical documentation.
2. Select the level of medical institution to provide obstetric and gynecological care to the patient.
3. Observe the sanitary and epidemiological regime in an obstetric hospital.
4. Determine the indications for hospitalization in the physiological and observational departments of a maternity hospital.
5. Carry out initial sanitary treatment of pregnant women and women in labor entering the hospital.
6. Inform the patient about the state of health, methods of examination and treatment.

Questions for self-study.

1. Structure of an obstetric hospital.
2. Rules for admission to work of maternity hospital personnel.
3. Rules for admission to a maternity hospital.
4. Equipment of the reception unit.
5. Indications for hospitalization in the observational obstetric department.
6. Obstetric hospital documentation.
7. Structure and equipment of the maternity department with an operating unit.
8. Equipment for the birth block.
9. Daily routine in the postpartum department.
10. Features of the sanitary and epidemiological regime in the postpartum department.
11. Organization of the work of the neonatal department.
12. Indicators of obstetric hospital performance (maternal and perinatal morbidity and mortality, septic morbidity).

Topic 2

(4 hours)

THE PELVIS FROM ANATOMICAL AND OBSTETRIC POINTS OF VIEW. THE FETUS AS AN OBJECT OF BIRTH. OBSTETRIC TERMINOLOGY

Motivation: Studying the topic is of great importance in obstetrics. The structure, size and features of the bony pelvis have a decisive influence on the course and outcome of labor. A normal pelvis is one of the main conditions for the physiological course of childbirth. Deviations in the structure of the pelvis, especially a decrease in its size, complicate the course of labor or present insurmountable obstacles for the fetus. When studying methods for examining pregnant women, it is necessary to pay great attention to the size of the pelvis and fetus, and the practical development of pelvimetry. Studying this topic is necessary to understand the biomechanism of labor. The knowledge and skills acquired in the process of studying this topic will help the doctor correctly examine pregnant women, establish a diagnosis and choose the optimal delivery tactics.

Purpose of the lesson.

To study a woman's birth canal (the bony pelvis, pelvic floor muscles, birth canal), the fetus as an object of birth and obstetric terminology.

Lesson objectives:

– study the bony pelvis (pelvic bones, joints, pelvic planes and diameters, the concept of true conjugate and methods for its determination, pelvic floor muscles);

– examine the fetal head (skull bones, sutures, fontanelles, head sizes, head segments);

– study obstetric terminology (fetal lie, presentation, position, varieties of positions, attitude (posture)).

Topic issues covered.

1. Anatomy of the bony pelvis (bones, ligaments, pelvic joints, true and false ("small and large") pelvis, the importance of the false pelvis dimensions for the characteristics of the true pelvis), features of the bony pelvis in women, classic planes of the true pelvis, their boundaries and diameters, diagonal and true conjugate, methods for determining the true conjugate. Long axis and pelvic inclination angle. Lumbosacral rhombus. Anatomy of the pelvic floor muscles and their role in labor.

2. The concept of fetal maturity and term, the study of the structure and size of the fetal head (skull bones, sutures, fontanelles, head size). Fetal descent. Head segments. The station of the fetal head in relation to the pelvic planes.

3. Study of obstetric terminology. Fetal lie, presentation, position, varieties of positions, attitude (posture).

Standard for mastering the topic.

After completing the lesson, the student should know:

1. The structure of the bony pelvis.
2. The planes of the pelvis, their boundaries and diameters.
3. Diagonal, anatomical and true conjugates.
4. Long axis and pelvic inclination angle.
5. The structure of the pelvic muscular support.
6. The structure of the skull of a full-term fetus, sutures, fontanelles.
7. Dimensions of the head, shoulder and pelvic girdle of the fetus.
8. Basic obstetric terms (fetal lie, presentation, position, varieties of positions, attitude (posture)).

Should be able to:

1. Show on the female pelvis mockup the boundaries of the pelvic planes.
2. Show on the female pelvis mockup the identification points of the anatomical and true conjugates.
3. Determine the diameter of the true conjugate (4 methods of determination).
4. Show the sutures and fontanelles on the head of a full-term fetus (doll).
5. Show the dimensions of the head of a full-term fetus, the dimensions of the fetal shoulder and pelvic girdle.
6. Determine the signs of fetal term.
7. On an obstetric phantom, give the doll a certain lie, presentation, position, variety of positions, posture.

Questions for self-study.

1. Features of the female pelvis and its difference from the male pelvis.
2. Pelvic bones and joints.
3. Diameters of a normal pelvis.
4. The plane of the pelvic inlet (boundaries and diameters).
5. The plane of greatest pelvic dimension (boundaries and diameters).
6. The plane of the midpelvis – the least pelvic dimensions (boundaries and diameters).
7. The plane of the pelvis outlet (boundaries and diameters).
8. Anatomical and true conjugate (boundaries and dimensions).
9. Pelvic floor muscles.
10. Fetal lie (longitudinal, transverse, oblique) and presentation. Fetal attitude (posture).
11. Fetal position and its determination. Varieties of positions.
12. Anatomical structure of the skull of a newborn.
13. Sutures and fontanelles on the head of a newborn.
14. Basic dimensions of the fetal head.
15. What is the head configuration?
16. The dimensions of the shoulder and pelvic girdles and their circumference.
17. The fetal back is to the left and anterior, the presenting part is the head. Formulate the diagnosis.
18. The dorsum of the fetus is to the right and posterior, the presenting part is the head. Formulate the diagnosis.

Topic 3

(10 hours: semester I – 6 hours, semester II – 4 hours)

EXAMINATION METHODS IN OBSTETRICS. DIAGNOSIS OF PREGNANCY. SUPERVISION OF PREGNANT WOMEN AND WOMEN IN LABOR

Motivation: A general practitioner needs to study and master methods for diagnosing pregnancy, examining pregnant women, various methods for determining the duration of pregnancy and expected date of birth. The knowledge and skills acquired in the process of studying this topic will help the doctor correctly examine pregnant women, establish a diagnosis and choose the optimal tactics for managing pregnant women, women in labor and postpartum, draw up medical documentation.

Purpose of the lesson.

1. Study and practically master methods of diagnosing pregnancy and methods of examining pregnant women.
2. Study and apply in practice various methods for determining the duration of pregnancy and expected date of birth, the period of granting maternity leave.
3. Learn to establish and correctly formulate an obstetric diagnosis; learn the basic principles of recording a birth history.
4. Be able to draw up medical documentation – birth history.

Lesson objectives.

1. Familiarize yourself with methods of examining pregnant women, conducting obstetric examinations in the 2nd half of pregnancy, and establishing an obstetric diagnosis.
2. Familiarize yourself with clinical and laboratory methods for diagnosing pregnancy.
3. Be able to apply in practice various methods for determining the duration of pregnancy and expected date of birth, the period of granting maternity leave.
4. Familiarize yourself with medical documentation in obstetric practice, with the registration of birth history.
5. Supervision of pregnant women, women in labor and postpartum women.

Topic issues covered.

1. Introducing students to medical documentation, teaching them how to fill out a birth history (a birth history diagram is attached). Peculiarities of interviewing pregnant women and women in labor. General anamnesis (working and living conditions, heredity and past diseases, allergy history, blood transfusions). Special anamnesis (menstrual function, sexual function, age and health of the husband, childbearing (generative) function, contraception, previous gynecological diseases, the course of this pregnancy (by trimester).

2. General objective examination (assessment of general condition, temperature measurement, examination of the skin and visible mucous membranes, examination of the circulatory, respiratory, digestive, urinary, nervous and endocrine systems).

3. Special obstetric examination. External obstetric examination (examination, measurement of abdominal circumference and height of the uterine fundus, pelvic examination, measurement of the circumference of the wrist joint (Solovyov index), measurement of the dimensions of the lumbosacral rhombus (Michaelis rhombus), Frank size, sagittal and transverse dimensions of the pelvic outlet, oblique dimensions of the pelvis, pelvic inclination angle, auscultation of the fetal heartbeat, external obstetric examination techniques (Leopold-Levitsky maneuvers). Internal obstetric examination (examination of the external genitalia, examination of the cervix using speculum, vaginal examination).

4. Signs of pregnancy. Presumable (doubtful) signs of pregnancy (subjective: changes in appetite, nausea, vomiting in the morning, changes in olfactory sensations, changes in the nervous system; objective: pregnancy scars, abdominal enlargement, hyperpigmentation of the skin on the face, along the white line of the abdomen, nipples and areola circles). Possible signs of pregnancy (cessation of menstruation, appearance of colostrum, cyanosis of the mucous membrane of the vagina and cervix, changes in the size, shape and consistency of the uterus (signs of Horwitz-Hegar, Snegirev, Piskachek, Gubarev and Gaus, Genter), determination of chorionic hormone in urine and blood). Reliable signs of pregnancy (diagnosis of intrauterine pregnancy by ultrasound, identification of fetal parts by palpation of the abdomen (Leopold- Levitsky maneuvers), determination of fetal movements during palpation, auscultation of the fetal heartbeat).

5. Additional examination methods. Instrumental methods (non-invasive) – cardiotocography, ultrasound, Doppler, determination of the biophysical profile of the fetus, amnioscopy, X-ray pelvimetry, etc. Laboratory non-invasive methods – determination of the level of human chorionic gonadotropin for the purpose of diagnosing pregnancy (β-hCG), prenatal screening (determination of β-hCG and PAPP-A at 11–14 weeks, determination of the level α-fetoprotein (AFP), estriol, β-hCG at 18–21 weeks of pregnancy in the mother's blood, testing for carriage of microorganisms TORCH-complex, bacteriological examination, molecular biological examination methods (PCR); invasive methods – amniocentesis, chorionic villus biopsy, cordocentesis, etc.

6. Determination of the term of pregnancy and expected date of birth (by the date of the last menstruation – Naegele's rule, by ovulation, by the first appearance at the antenatal clinic, by the date of the first fetal movement, by the date of prenatal leave, according to ultrasound data). Scheme of obstetric diagnosis (fact of pregnancy, gestational age, information about the fetal lie, presentation, position and varieties of positions, obstetric pathology, extragenital pathology).

Questions for the lecture.

1. Physiology of menstrual function, functional diagnostic tests.

2. Physiology of pregnancy. The main hormones and proteins of pregnancy. Chorionic gonadotropin, its role in the diagnosis of pregnancy. Synthesis and metabolism of estrogens. α-fetoprotein, its role in prenatal screening.

3. Physiology of pregnancy. Major changes in the cardiovascular, respiratory, digestive, urinary, nervous, endocrine, musculoskeletal and hemostatis systems. Dynamics of body weight during pregnancy.

4. Physiology of pregnancy. Changes in the genital organs during pregnancy. The size of the uterus and the height of its fundus at different stages of pregnancy. Decidua. Changes in the cervix. Lower uterine segment. Changes in the mammary glands, regulation of lactation.

5. Methods of functional diagnostics in obstetrics (cardiotocography, ultrasound, Doppler, determination of the biophysical profile of the fetus, amnioscopy; amniocentesis, cordocentesis, etc.). Prenatal screening.

Standard for mastering the topic.

After completing the lesson, the student should know:

1. Signs of pregnancy (doubtful, probable, reliable).
2. Changes in the size of the uterus depending on the duration of pregnancy.
3. Dimensions of a false ("large") pelvis.
4. Four external obstetric examination appointments.
5. The concepts of "small segment", "large segment" of the fetal head.
6. Rules for the auscultation of the fetal heartbeat.
7. Cervical maturity assessment scale (Bishop).
8. Additional examination methods: determining β-hCG, ultrasound diagnostics, cardiac monitoring, Doppler, etc.

Should be able to:

1. Independently collect anamnesis from pregnant women and women in labor, fill out a birth history.
2. Conduct a general objective and special obstetric examination, including measurement of the abdominal circumference, the height of the uterine fundus, the size of the false (large) pelvis, determine the size of the true conjugate (4 methods of determination), measure the circumference of the wrist joint, the Frank size, the size of the lumbosacral rhombus, carry out four external obstetric examination (Leopold- Levitsky maneuvers), auscultate the fetal heartbeat, conduct an internal obstetric examination, assess the degree of maturity of the cervix, determine the presenting part of the fetus.
3. Evaluate additional research methods (β-hCG, ultrasound, prenatal screening, etc.).
4. Determine the pregnancy term and the expected date of birth using various methods.

Questions for self-study.

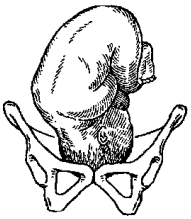
1. External dimensions of the pelvis.
2. External conjugate, its measurement and determination of the size of the true conjugate.
3. Diagonal conjugate, its measurement and determination of the size of the true conjugate.
4. Pelvic inclination angle.
5. The first method of external obstetric examination, its purpose and technique.
6. The second method of external obstetric examination, its purpose and technique.
7. The third method of external obstetric examination, its purpose and technique.
8. The fourth method of external obstetric examination, its purpose and technique.
9. Define the concept of "large segment".
10. How is the height of the uterine fundus and abdominal circumference measured?
11. How is the circumference of the wrist joint (Solovyov index) measured and its significance in obstetrics determined?
12. What is the lumbosacral rhombus?
13. How to auscultate the fetal heartbeat and what is used for doing it?
14. How are the dates of pregnancy and birth determined in different ways?

Task No. 1.

Determine the lie, presentation, position and variety of position. Where the best heartbeat auscultation point is located?

a)

b)



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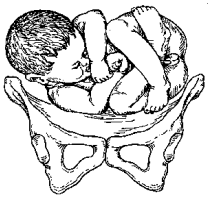


e)

f)

g)

Topic 4

(6 hours)

BIOMECHANISMS (MECHANISMS) OF LABOR WITH OCCIPUT ANTERIOR AND OCCIPUT POSTERIOR PRESENTATIONS

Motivation: Knowledge of the biomechanism of childbirth is necessary for studying the clinic and managing of childbirth. The knowledge and skills acquired in the process of studying this topic will help the doctor to correctly examine women in labor, establish a diagnosis during labor and choose the optimal delivery tactics, and correctly provide obstetric care in the second stage of labor.

Purpose of the lesson.

1. To study the biomechanisms (mechanisms) of labor with occiput anterior and occiput posterior presentations

Lesson objectives.

1. To study the biomechanism (mechanism) of labor with occiput anterior presentation.
2. To study the biomechanism (mechanism) of labor with occiput posterior presentation.

Topic issues covered.

1. Revision of the anatomy of the bony pelvis, the boundaries and dimensions of the pelvic planes, the structure and dimensions of the fetal head, the concept of head segments. The station of the fetal head in relation to the planes of the pelvis. Revision of obstetric terminology.
2. The concept of occiput presentation, diagnosis of occiput presentation (first and second positions, anterior and posterior varieties of positions).
3. Definition of the concept of the biomechanism (mechanism) of labor, factors that play a role in the implementation of the biomechanism (mechanism) of labor.
4. Study of the biomechanism (mechanism) of labor with occiput anterior presentation. Moments of the biomechanism (mechanism) of labor (the cardinal movements). Leading point, large segment of the head in occiput anterior presentation, fixation points.
5. Study of the biomechanism (mechanism) of labor with occiput posterior presentation. Moments of the biomechanism (mechanism) of labor (the cardinal movements). Leading point, large segment of the head in occiput posterior presentation, fixation points.

Standard for mastering the topic.

After completing the lesson, the student should know:

1. The concept of occiput presentation.
2. Diagnosis of occiput presentation (first and second positions, anterior and posterior varieties of positions).
3. The concept of the biomechanism (mechanism) of labor.
4. Biomechanism (mechanism) of labor with occiput anterior presentation.
5. Biomechanism (mechanism) of labor with occiput posterior presentation.
6. The concepts of "small segment", "large segment" of the fetal head.
7. The concepts of "leading point", "fixation point".

Should be able to:

1. Recognize, during external and internal examination, the presenting part and its station in the birth canal.
2. Show on a skeletonized pelvis with a doll the moments (the cardinal movements) of the biomechanism (mechanism) of labor with occiput anterior and occiput posterior presentations.
3. With the help of external and internal obstetric examination, be able to diagnose aspects of the biomechanism (mechanism) of labor, determine deviations from the normal biomechanism (mechanism) of labor with occiput presentation.

Questions for self-study.

1. Planes of the pelvis, their sizes.
2. Dimensions of the fetal head.
3. Pelvic long axis.
4. Leading point of the head.
5. Definition of the biomechanism (mechanism) of labor.
6. Biomechanism (mechanism) of labor with occiput anterior presentation.
7. Biomechanism (mechanism) of labor with occiput posterior presentation.
8. Differences in the biomechanism (mechanism) of labor with occiput anterior presentation and occiput posterior presentation.
9. What aspects of the biomechanism (mechanism) of labor are similar with occiput anterior presentation and occiput posterior presentation?
10. Complications that arise during labor with occiput posterior presentation.

Task No. 1.

The small segment of the fetal head is located in the pelvic inlet, the sagittal suture is palpated in the right oblique diameter, the small (posterior) fontanel is on the left anteriorly, the large (anterior) fontanel is on the right posteriorly, above the small one.

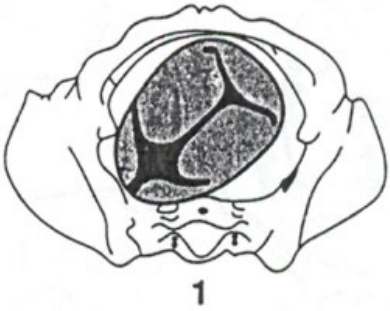


Fig. 1

Determine the fetal lie, presentation, position and variety of position.

Task No. 2.

The small segment of the fetal head is located in the pelvic inlet, the sagittal suture is palpated in the left oblique diameter, the large (anterior) fontanel is on the right anteriorly, the small (posterior) fontanel is on the left posteriorly, below the large one.

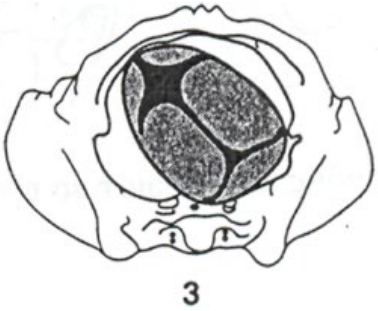


Fig. 2

Determine the fetal lie, presentation, position and variety of position.

Task No. 3.
Determine compliance.

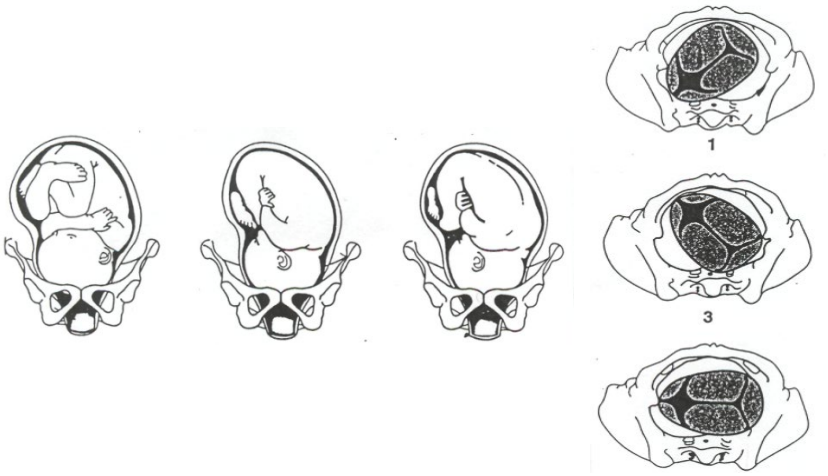


Fig. 3

Topic 5

(8 hours)

CLINICAL COURSE AND MANAGEMENT OF LABOR WITH CEPHALIC PRESENTATION

Motivation: A general practitioner needs to study and master the clinic and management of labor with cephalic presentation. The knowledge and skills acquired in the process of studying this topic will help the doctor to correctly examine pregnant women and women in labor, establish a diagnosis and choose the optimal tactics for delivery, and provide the necessary assistance during physiological labor.

Purpose of the lesson.

To study the clinical course and management of labor with cephalic presentation, features of external and internal examination during childbirth, obstetric care and toileting of newborns.

Lesson objectives.

1. Study the concepts of precursors of labor.
2. Study the clinical course and management of the preliminary period.
3. Study the clinical course and management of the first (dilatation) stage, the second (expulsion) stage and the third (afterbirth) stage of labor.
4. Study methods for monitoring fetal well-being during labor.
5. Study the assessment of a newborn's condition on the Apgar scale, and the first toilet of a newborn.
6. Study the clinical course and management of the early postpartum period.

Topic issues covered.

1. Definition of childbirth. Causes of labor. Precursors of labor. Psychoprophylactic preparation for childbirth. Physiological preliminary period. Diagnosis and management of the preliminary period.

2. Clinical course of the first stage of labor. Processes occurring in the uterine muscle during each contraction. Characteristics of contractions. Dilatation of the cervix in nulli- and multiparous women. The role of the amniotic fluid. Hydrostatic action of membranes in labor. Rupture of the membranes. Management of labor during the dilatation stage. Indications for vaginal examinations during the first stage of labor. Methods of pain relief during childbirth. Technique of epidural anesthesia.

3. Clinical course of the second stage of labor. Characteristics of pushing. Fetal descent along the birth canal. Management of labor during the expulsion stage. Obstetric aid during labor with cephalic presentation.

4. Clinical course of the third stage of labor. Central and peripheral separation of the placenta. Signs of placental separation. Management of labor in the third stage. Methods of removing separated placenta. Physiological blood loss during childbirth. Prevention of the obstetric hemorrhage in the third stage of labor and early postpartum period.

5. Characteristics of the fetal heartbeat. Methods of monitoring fetal well-being during labor. CTG (cardiotocography) – monitoring.

6. Apgar assessment of the newborn. Newborn's first toilet. Prevention of gonoblennorrhea. Treatment of skin and umbilical cord. Measuring and weighing a newborn, completing documentation for a newborn.

7. Clinical course of the early postpartum period. Assessment of the general condition of the postpartum woman (temperature, pulse, blood pressure, color of the skin and mucous membranes, condition of the uterus and the discharge). Management of the early puerperium. Lacerations of the birth canal. Postpartum examination of the cervix, vagina, perineum.

Questions for the lecture.

1. Definition of childbirth. Causes of labor. Precursors of labor. Psychoprophylactic preparation for childbirth. Physiological preliminary period. Diagnosis and management of the preliminary period.

2. Clinical course of the first stage of labor. Processes occurring in the uterine muscle during each contraction. Characteristics of contractions. Dilatation of the cervix in nulli- and multiparous women. The role of the amniotic fluid. Hydrostatic action of membranes in labor. Rupture of the membranes. Management of labor during the dilatation stage. Methods of pain relief during childbirth. Technique of epidural anesthesia.

3. Clinical course of the second stage of labor. Characteristics of pushing. Fetal descent along the birth canal. Management of labor during the expulsion stage. Obstetric aid during labor with cephalic presentation.

4. Characteristics of the fetal heartbeat. Methods of monitoring fetal well-being during labor. CTG (cardiotocography) – monitoring.

5. Clinical course of the third stage of labor. Central and peripheral separation of the placenta. Signs of placental separation. Management

of labor in the third stage. Methods of removing separated placenta. Physiological blood loss during childbirth. Prevention of the obstetric hemorrhage in the third stage of labor and early postpartum period.

Standard for mastering the topic.

After completing the lesson, the student should know:

1. Determination of precursors of labor, preliminary period, childbirth.
2. Duration of labor (total and by stages).
3. Key points in the clinical course and management of labor and delivery.
4. Features of the cervical effacement and dilatation in nulli- and multiparous women.
5. Determination of premature, timely and delayed rupture of the membranes.
6. Manual aid for cephalic presentation ("perineal protection").
7. Prevention of the obstetric hemorrhage in the third stage of labor and early postpartum period.
8. Signs of placenta separation and methods of removing placenta.

Should be able to:

1. Evaluate the contractions quantitatively and qualitatively (duration, frequency, rhythm, strength, pain).
2. Auscultate and evaluate the fetal heartbeat during and after contractions.
3. Assess the condition of the cervix during vaginal examination, the presence or absence of membranes, and the presenting part.
4. Assess the station of the presenting part and fetal position/variety of position.
5. Provide manual assistance in labor with occiput anterior presentation.
6. Prevent hemorrhage in the third stage of labor and early postpartum period.
7. Determine the signs of placental separation.
8. Examine the placenta, determine blood loss during labor.

Questions for self-study.

1. Reasons for the onset of labor.
2. Precursors of labor.
3. What processes occur in the uterine muscle during each contraction?
4. Characteristics of contractions.
5. Give the definition and time parameters of the first, second and third stages of labor.
6. List the points of manual assistance in labor with occiput anterior presentation to protect the perineum.
7. Signs of placental separation.
8. Indications for vaginal examinations during labor.
9. How to determine presentation by the configuration of the head and birth tumor?
10. Methods for removing separated placenta.
11. What is the physiological blood loss during labor?
12. Prevention of the obstetric hemorrhage in the third stage of labor and early postpartum period.
13. Characteristics of the fetal heartbeat. Methods of monitoring fetal well-being during labor.

Task No. 1.

A 20-year-old primigravida was delivered to the maternity hospital with contractions every 5–6 minutes, 40–45 seconds each, of moderate strength and pain, which lasted for 7 hours. No pathology was detected from the internal organs.

Obstetric examination: Abdominal circumference is 96 cm, fundus height is 32 cm; pelvic dimensions: 26–29–32–21. Blood pressure – 115/70 mm Hg, pulse 80 beats in 1 minute, of satisfactory filling. The lie of the fetus is longitudinal, the presenting part is the head, engaged to the pelvic inlet. The fetal heartbeat is clear, rhythmic, 146 beats per minute, and is auscultated on the left, below the navel.

Vaginal examination: The external genitalia are without pathology. The vagina corresponds to nulliparous dimensions. The cervix is soft and thin, the cervical opening is 5 cm. The membranes are intact. The presenting part is the head, engaged to the pelvic inlet. The small (posterior) fontanel is palpated on the left anteriorly, the large (anterior) fontanel on the right posteriorly, the sagittal suture is palpated in the right oblique diameter of pelvic inlet. The small fontanel is lower

than the large one. The promontorium is not reached. There are no exostoses in the pelvis. The discharge is mucous.

Formulate and justify the diagnosis and delivery tactics.

Task No. 2.

A 26-year-old multiparous woman was admitted to the maternity hospital with regular contractions.

The first pregnancy ended in a normal birth, with newborn weight 3200 g, heigth 52 cm. This is the second pregnancy. No pathology was detected from the internal organs.

Objectively: Pelvic dimensions: 25–28–31–20. The lie of the fetus is longitudinal. The fetal head is located in the midpelvis. The fetal heartbeat is clear, rhythmic, 132 beats per minute.

Vaginal examination: The external genitalia are without pathology. The cervix is dilatated fully, the membranes are ruptured. The fetal head is located in the midpelvis; it occupies the entire inner surface of the symphysis pubis, the entire surface of the sacrum, and the ischial spines on the sides. The small (posterior) fontanel is located anteriorly, near the symphysis pubis, the large (anterior) fontanel is located posteriorly, near the sacrum, above the small one. Sagittal suture is located in anteriopos-terior pelvic diameter.

Formulate and justify the diagnosis and delivery tactics. In what pelvic plane is the head located?

Topic 6

(6 hours)

POSTPARTUM PERIOD (PUERPERIUM)

Motivation: A general practitioner needs to study the clinical course and management of the physiological postpartum period, since without understanding the essence of the processes occurring in a woman's body during the puerperium, the necessary prevention of complications and rational assistance in the case of their occurrence cannot be carried out.

Purpose of the lesson: study the clinical course and management of the physiological puerperium, become familiar with the structure and principles of functioning of the postpartum department.

Lesson objectives.

1. Explore the concepts and duration of the postpartum period (puerperium).
2. Study the changes in the organs of a postpartum woman during the puerperium.
3. Study the methodology for examining postpartum women.
4. Study the operating hours of the postpartum department and the features of care for postpartum women.
5. Study the specifics of health education work with postpartum women, the basic principles of breastfeeding.

Topic issues covered.

1. Concept and duration of the postpartum period.
2. Changes in the organs of the mother during the postpartum period. Changes in the genitals and mammary glands of a postpartum woman in the puerperium. The uterus – involution in the puerperium, possible causes of subinvolution (endocrine disorders, parity, nature of these births, inflammatory processes in the uterus, underdevelopment, uterine tumors, etc.). Formation of the external and internal os of the cervix. Endometrium – the timing of epithelization of the inner surface of the uterus. Lochia, their nature. Involution of the ligamentous apparatus, tubes, ovaries, pelvic floor muscles, vagina. Changes in the mammary glands. Changes in hormonal status, cardiovascular, endocrine and excretory systems in a postpartum woman.
3. Methodology for examining postpartum women. Anamnesis collection, objective general and special examination, including examination of

the condition of the mammary glands and nipples, the condition of the uterus, perineum, the nature of lochia, bladder and intestinal function.

4. Working hours of the postpartum department. The cyclicity of filling the department, the timing of discharge from the department, depending on the course of labor and the puerperium. Rules for caring for postpartum women, daily routine, diet and personal hygiene rules. Structure and functions of the dairy room. Postpartum gymnastics.

5. Features of sanitary and educational work with postpartum women, basic principles of breastfeeding. Teaching postpartum mothers diet and personal hygiene rules at home in order to prevent mastitis and other postpartum diseases.

Questions for the lecture.

Prevention of the obstetric hemorrhage in the third stage of labor and early postpartum period.

Standard for mastering the topic.

After completing the lesson, the student should know:

1. Changes in hormonal status, cardiovascular, endocrine and excretory systems in postpartum women.
2. Changes in the genitals and mammary glands of a postpartum woman in the puerperium.
3. Prevention of an obstetric hemorrhage in the third stage of labor and early postpartum period.
4. Features of the course and management of the puerperium.
5. Sanitary and hygienic measures in the puerperium.
6. Basic principles of breastfeeding.
7. Additional examination methods in the puerperium.

Should be able to:

1. Conduct a complete examination of the postpartum woman (history collection, general and special objective examination, condition of the mammary glands, condition of the uterus, the nature of lochia, bladder and bowel function).
2. Based on objective and additional examination methods (ultrasound, blood test, urine test, smear for vaginal flora), assess the course of the postpartum period.
3. Conduct differential diagnosis of the physiological and complicated course of the postpartum period.

Questions for self-study.

1. Definition and duration of the postpartum period (puerperium).
2. What is a woman called after childbirth?
3. How is the postpartum period divided by timing?
4. How to manage the early postpartum period?
5. What should a doctor do before transferring a woman to the postpartum department?
6. How does the uterus involute?
7. How does cervical involution occur?
8. When does epithelization of the inner surface of the uterus end?
9. What is lochia?
10. How does the function of the mammary glands change?
11. Composition of human milk.
12. How is the lactation process regulated?
13. Clinic for normal puerperium.
14. The functions of which organs can be impaired in the postpartum period and how to prevent this?
15. What measures are taken in case of breast engorgement?
16. How to care for a postpartum woman whose perineum has stitches?
17. Daily routine of a postpartum woman.
18. Diet of a postpartum woman.

Task No. 1.

The parturient woman was transferred to the postpartum department after physiological birth along with the newborn.

What indicators should the midwife on this unit monitor after transferring a woman?

Task No. 2.

First birth at term. Premature rupture of membranes. The duration of labor is 12 hours 30 minutes, the anhydrous interval is 15 hours 30 minutes. From the third trimester there was a decrease in hemoglobin to 95 g/l.

What complications are possible in the postpartum period? Suggest preventative measures.

Topic 7

(6 hours)

EXTENSION PRESENTATIONS OF THE FETUS

Motivation: The incidence of extension presentations is about 1%. Extension presentations are pathological presentations and are accompanied by a high incidence of complications. The knowledge and skills acquired in the process of studying this topic will help the doctor correctly examine pregnant women and women in labor, establish a diagnosis and choose the optimal method of delivery for extension presentation of the fetus.

Purpose of the lesson.

1. To study various options for extension presentations, the biomechanisms (mechanisms) of labor with sinciput, brow and face presentations.
2. Learn how to recognize extension presentations during external and vaginal examinations.
3. To study the features of the birth clinic for extension presentations of the fetus, the choice of the optimal method of delivery for extension presentations.

Lesson objectives.

1. Explore different options for extension presentations.
2. To study the etiology of extension presentations.
3. To study the biomechanisms (mechanisms) of labor with extension presentations.
4. To study the diagnosis of various degrees of extension presentations during external and internal examination.
5. To study the features of the birth clinic with extension presentations of the fetus.
6. To study possible complications during labor with extension presentations.
7. Be able to determine the optimal method of delivery for extension presentations.

Topic issues covered.

1. Variants of extension presentations. Three degrees of head extension (1 – sinciput, 2 – brow, 3 – face presentation), large segments of the fetal head for each presentation option. Frequency of labor with sinciput, brow and face presentations.
2. Etiology of extension presentations (insufficiency of the uterine lower segment, contracted pelvis, polyhydramnios, multiple pregnancies, early rupture of membranes, kyphosis of the maternal spine, insufficiency of the

anterior abdominal wall and pelvic floor, submucosal uterine fibroids, tumors in the fetal neck, placenta previa, very large or very small fetal head, loss of normal elasticity of the fetus (dead fetus), etc.).

3. The biomechanisms (mechanisms) of labor with extension presentations (sinciput, brow, face), features of the configuration of the fetal head during labor with these presentations.

4. Diagnosis of various degrees of extension presentations by external and internal examination.

5. Peculiarities of the birth clinic with extension presentations of the fetus. Impossibility of normal birth of a term fetus with brow presentation and mentum posterior position of face presentation.

6. Possible complications during labor with extension presentations, their diagnosis and prevention.

7. Choosing the optimal method of delivery for extension presentations. Indications for cesarean section for extension presentations.

Questions for the lecture: No.

Standard for mastering the topic.

After completing the lesson, the student should know:

1. Various options for extension presentations.
2. Causes of extension presentations.
3. Biomechanisms (mechanisms) of labor with extension presentations (sinciput, brow, face).
4. Diagnosis of various degrees of extension presentations.
5. Peculiarities of the birth clinic with extension presentations.
6. Possible complications and features of labor management.
7. Indications for cesarean section for extension presentations.

Should be able to:

1. Recognize the nature of cephalic presentation during external and vaginal examinations.
2. Using a phantom, demonstrate all moments (the cardinal movements) of the biomechanism of labor with extension presentations, and establish deviations from the normal biomechanism of labor with extension presentations.
3. Correctly record examination data in the birth history, make a diagnosis and determine the delivery tactics (vaginal birth or cesarean section).

Questions for self-study.

1. Reasons for the formation of extension presentations.
2. Biomechanism of labor with the first degree of head extension.
3. Biomechanism of labor with face presentation, mentum anterior position.

4. Which extension presentation is an absolute indication for cesarean section?

5. What aspects of the biomechanism of labor are common to all extension presentations?

6. What complications does a mother experience during labor with an extension presentation?

7. What complications are possible for a child born in an extension presentation?

Task No. 1.

A 33-year-old multiparous woman, after 10 hours of normal labor, was admitted to the maternity hospital.

Objectively: The pelvic dimensions are normal. The fetal head is engaged to the pelvic inlet. The estimated fetal weight is 4000 g, the fetal heart rate is 136 beats per minute.

During vaginal examination: The cervix is dilatated almost fully, the membranes are intact. The sagittal suture of the head is located in transverse pelvic diameter, there is a posterior fontanel on the right, an anterior fontanel on the left, below the posterior one. The promontorium is not reached, there are no exostoses in the pelvis.

Formulate and justify the diagnosis and delivery tactics.

Task No. 2.

A 20-year-old multiparous woman was delivered by ambulance with a diagnosis of 39 weeks of pregnancy, cephalic presentation, the first stage of labor. The membranes were ruptured 1 hour before. The fetal heartbeat is 140 beats per minute, clear and rhythmic.

During vaginal examination: The cervix is dilatated fully, there are no membranes, the presenting part is the head, the frontal suture is in the transverse diameter of the pelvic inlet, the anterior angle of the large fontanel, eye-sockets, brow ridges and root of the nose are reached. The promontorium is not reached, there are no exostoses in the pelvis.

Formulate and justify the diagnosis and delivery tactics.

Task No. 3.

A 28-year-old multiparous woman was admitted with normal labor for 6 hours and intact membranes. The pelvic dimensions are normal. The estimated fetal weight is 3200 g, the heart rate is 140 beats per minute.

During vaginal examination: The cervix is dilatated fully, the membranes are intact, the presenting part is the head, the facial line is in the right oblique diameter of the pelvic inlet, the chin (mentum) is on the left anteriorly, the brow ridges and the nose are on the right posteriorly.

Formulate and justify the diagnosis and delivery tactics.

Topic 8

(8 hours)

PREGNANCY AND LABOR WITH BREECH PRESENTATION

Motivation: The incidence of breech presentation at term is 3–4%, while the incidence of breech presenting fetuses before 28 weeks of pregnancy is about 28%. Breech deliveries carry a higher perinatal mortality and morbidity, largely due to birth hypoxia/trauma, prematurity and an increased incidence of congenital malformations. The knowledge and skills acquired in the process of studying this topic will help the doctor correctly examine pregnant women and women in labor, establish a diagnosis and choose the optimal delivery tactics for a breech fetus.

Purpose of the lesson:

o to study various options for breech presentation, the biomechanism of labor with breech presentation, the course of pregnancy and labor;

o to study management of labor and provide manual assistance during vaginal breech deliveries;

o be able to determine the optimal method of delivery for breech presentation.

Lesson objectives.

1. To study the various options for breech presentation, the etiology of breech presentation.
2. To study the biomechanism (mechanism) of labor with frank breech presentation.
3. To study the diagnostics of breech presentation, the course of pregnancy and labor.
4. To study management of labor and provide manual assistance during vaginal breech deliveries.
5. To study possible complications during vaginal breech deliveries.
6. Be able to determine the optimal method of delivery for breech presentation.
7. Be able to perform the operation of fetal breech extraction (on a phantom).

Topic issues covered.

1. Classification of breech presentations (frank (extended) breech, complete (flexed) breech and footling breech presentation).
2. Etiology of breech presentation.

3. Biomechanism (mechanism) of labor with frank breech presentation.

4. Diagnosis of breech presentation (complaints, anamnesis, data from general and special obstetric examination, additional diagnostic methods, formulation of diagnosis).

5. Clinical course and management of pregnancy and labor. The options for management of breech presentation: external cephalic version; cesarean section; vaginal breech birth.

6. Possible complications during pregnancy, in the first and second stages of labor (premature rupture of membranes, prolapse of the umbilical cord and small parts of the fetus, dystocia of labor, fetal hypoxia, fetal nuchal arms, formation of posterior variety of position, head extension and entrapment, cervical spasm, birth trauma). Prevention and ways to eliminate complications during vaginal breech deliveries.

7. Manual assistance for breech presentation. Tsovyanov's manual assistance for breech presentation (purpose, technique). Lovsett's maneuver (purpose, technique). Classic manual assistance (purpose, technique). The methods for delivery of the aftercoming head by flexion (Mauriceau-Levret-Lachapelle and Smellie-Veit maneuver). Forceps to aftercoming head.

8. Operation of fetal breech extraction (indications, conditions, surgical technique).

9. External cephalic version (indications, contraindications, conditions, technique).

10. Choosing the optimal method of delivery for breech presentation. Possible indications for cesarean section.

Questions for the lecture.

1. Classification of breech presentations (frank (extended) breech, complete (flexed) breech and footling breech presentation).

2. Etiology of breech presentation.

3. Biomechanism (mechanism) of labor with frank breech presentation.

4. Diagnosis of breech presentation (complaints, anamnesis, data from general and special obstetric examination, additional diagnostic methods, formulation of diagnosis).

5. Clinical course and management of pregnancy and labor. The options for management of breech presentation: external cephalic version; cesarean section; vaginal breech birth.

6. Possible complications during pregnancy, in the first and second stages of labor (premature rupture of membranes, prolapse of the umbilical cord and small parts of the fetus, dystocia of labor, fetal hypoxia, fetal nuchal arms, formation of posterior variety of position, head extension and entrapment, cervical spasm, birth trauma). Prevention and ways to eliminate complications during vaginal breech deliveries.

7. Manual assistance for breech presentation. Tsovyanov's manual assistance for breech presentation (purpose, technique). Lovsett's maneuver (purpose, technique). Classic manual assistance (purpose, technique). The methods for delivery of the aftercoming head by flexion (Mauriceau-Levret-Lachapelle and Smellie-Veit maneuver). Forceps to aftercoming head.

8. Operation of fetal breech extraction (indications, conditions, surgical technique).

9. External cephalic version (indications, contraindications, conditions, technique).

10. Choosing the optimal method of delivery for breech presentation. Possible indications for cesarean section.

Standard for mastering the topic.

After completing the lesson, the student should know:

1. Definition and classification of breech presentations.
2. Etiology of breech presentation.
3. Biomechanism (mechanism) of labor with frank breech presentation.
4. Specifics of the course of pregnancy and labor.
5. Manual methods used during childbirth with breech presentation.
6. Complications arising in the first and second stages of labor with fetal breech presentation.
7. Indications for fetal breech extraction and complications of this operation.

Should be able to:

1. Examine pregnant women and women in labor using external methods.
2. Diagnose fetal breech presentation.
3. Using a phantom, demonstrate all moments of the biomechanism (mechanism) of labor with frank breech presentation; recognize them during internal examination, determine the station of the presenting part in the birth canal.
4. Provide manual assistance according to Tsovyanov.

5. Provide classic manual assistance, demonstrate the methods for delivery of the aftercoming head by flexion (Mauriceau-Levret-Lachapelle and Smellie-Veit maneuver).

6. Correctly record examination data in the birth history, make a diagnosis and determine the delivery tactics (vaginal breech birth or cesarean section).

7. Perform on the phantom an operation of fetal breech extraction.

Questions for self-study.

1. Definition of the concept of fetal breech presentation.
2. Classification of fetal breech presentations.
3. Frequency of fetal breech presentation.
4. Etiology of fetal breech presentation.
5. Diagnostics of fetal breech presentation.
6. Moments of the biomechanism (mechanism) of labor with frank breech presentation.
7. Features of the course of pregnancy with a breech presentation.
8. Features of the course and complications of the first stage of labor with a breech presentation.
9. Features of the course and complications of the second stage of labor with a breech presentation.
10. Manual methods used during labor with a breech presentation.
11. When is the classic manual assistance used for fetal breech presentation?
12. Indications for fetal breech extraction.

Task No. 1.

A 17-year-old primiparous woman was admitted to the maternity hospital with a full-term pregnancy, without labor activity, with rupture of membranes two hours before. This is the first pregnancy. Registered at the antenatal clinic since 28 weeks, visits are irregular. The total weight gain is 10 kg.

Objectively: The condition is satisfactory, no complaints, blood pressure 120/60, 120/60 mm Hg. Height 162 cm, weight 73 kg. Pelvic dimensions: 26–28–30–21 cm. Michaelis rhombus dimensions are 11×11 cm. Abdominal circumference is 105 cm, height of the uterine fundus is 38 cm. Estimated fetal weight is 3900 g. No labor activity. The fetal heartbeat is clear, rhythmic, 144 beats per minute.

During vaginal examination: The cervix is up to 2 cm long, completely softened, the cervical canal is passable for 2 fingers. The membranes are

ruptured. The fetal buttocks are presented and engaged to the pelvic inlet. The promontorium is not reachable. Light amniotic fluid is leaking.

Formulate and justify the diagnosis and delivery tactics.

Task No. 2.

A multiparous woman, 30-years-old, 38 weeks of pregnancy, was admitted to the maternity hospital with complaints of cramping pain in the lower abdomen for two hours. Pregnancies: 1st (8 years ago) ended in birth with cephalic presentation (3650 g, 53 cm), without complications; 2nd (4 years ago) ended in spontaneous miscarriage at 12 weeks with uterine curettage, without complications; this is the 3rd pregnancy. The patient denies gynecological diseases.

The course of this pregnancy was without complications. The total weight gain is 7 kg.

Objectively: The condition is satisfactory. Height 175 cm, Weight 68 kg. Pelvic dimensions: 26–28–30–21 cm. Solovyov index 15 cm. Michaelis rhombus is 11×10 cm. Abdominal circumference is 100 cm, height of the uterine fundus is 35 cm. Estimated fetal weight is 3500.0 g. Contractions after 6–7 minutes for 35 seconds, of good strength, moderate soreness. The fetal lie is longitudinal, the back is determined on the left side of the abdomen and the small parts of the fetus on the right. The fetal head is identified in the fundus of the uterus, the fetal buttocks are presented and engaged to the pelvic inlet. The fetal heartbeat is clear, rhythmic, 140 beats per minute. The membranes are intact.

Vaginal examination: The cervix is shortened to 1.5–2.0 cm, soft, in the center of the true pelvis, the cervical canal freely allows one finger to pass through. The membranes are intact. The fetal buttocks are presented and engaged to the pelvic inlet. The promontorium is not reached. No exostoses are detected.

Formulate and justify the diagnosis and delivery tactics.

Topic 9

(8 hours)

ABORTION. INDICATIONS AND CONTRAINDICATIONS FOR TERMINATION OF PREGNANCY. SPONTANEOUS ABORTION. PREMATURE BIRTH. PREVENTION OF ABORTION. CONTRACEPTION

Motivation: In the context of the demographic crisis in Russia, the issue of preventing abortions and preventing miscarriages arises. In Russia, out of 10 pregnancies, 7 end in abortion and only 3 in childbirth. There remains a high level of complications after abortions – about 70% of women suffer from inflammatory diseases of the female genital area, endocrine disorders, miscarriage, and infertility. The rate of miscarriage is 10–25% and does not tend to decrease. The difficult socio-economic and environmental conditions and the significant spread of sexually transmitted infections lead to a decrease in the number of women whose pregnancy and childbirth proceed without complications. A general practitioner also needs knowledge of basic methods of contraception in order to prevent abortions and their consequences, leading to reproductive dysfunction.

Purpose of the lesson.

1. To study the problem of miscarriage.
2. Learn how to perform an abortion in the early stages and how to terminate a pregnancy in the later stages.
3. Learn to select the optimal and individual method of contraception.

Lesson objectives.

1. To study the problem of miscarriage (clinical forms, etiology, pathogenesis, clinical symptoms, diagnostics and treatment of early and late spontaneous abortions, premature births).
2. Learn methods of examining women with miscarriage, the basic principles of prevention and treatment of threatened miscarriage.
3. Learn the technique of abortion in the early stages and methods of terminating pregnancy in the later stages.
4. Study possible complications of abortion, their prevention and treatment.
5. Learn modern methods of contraception, choosing the optimal method.

Topic issues covered.

1. Miscarriage. Definition, clinical forms of miscarriage, etiology and pathogenesis of miscarriage. Infectious diseases and miscarriage. Neuroendocrine causes of miscarriage. Hereditary thrombophilias, their role in miscarriage. Complications of pregnancy and extragenital pathology. Uterine factor of miscarriage. Genetic reasons. Immunological causes of miscarriage.

2. Clinic, diagnosis and treatment of early and late spontaneous abortions. Spontaneous and artificial (hospital, out-of-hospital) abortions. Various forms of spontaneous miscarriages (early, late, recurrent (habitual), threatened, inevitable, complete, incomplete, missed).

3. Methods for examining women with miscarriage. Pregravid preparation. Basic principles of prevention and treatment of threatened miscarriage, management of premature birth.

4. Methods of terminating pregnancy at the request of a woman and for medical reasons in the early and late stages of pregnancy.

5. Possible complications of abortion, their prevention and treatment.

6. Modern methods of contraception. Hormonal contraception (combined oral contraceptives, parenteral methods of using combined estrogen-gestagen drugs, oral gestagen contraceptives, parenteral gestagen drugs, hormonal-containing intrauterine system "Mirena". Emergency contraception. Intrauterine contraception. Traditional methods of contraception: barrier – chemical (spermicides) and mechanical (condoms, vaginal diaphragms, cervical caps). Physiological methods of contraception. Male contraception. Surgical methods of contraception (sterilization). Adolescent contraception. Postpartum contraception. Contraception after induced abortion. Choosing the optimal method of contraception.

Questions for the lecture.

1. Miscarriage. Definition, clinical forms of miscarriage, etiology and pathogenesis of miscarriage. Infectious diseases and miscarriage. Neuroendocrine causes of miscarriage. Hereditary thrombophilias, their role in miscarriage. Complications of pregnancy and extragenital pathology. Uterine factor of miscarriage. Genetic reasons. Immunological causes of miscarriage.

2. Clinic, diagnosis and treatment of early and late spontaneous abortions. Spontaneous and artificial (hospital, out-of-hospital) abortions. Various forms of spontaneous miscarriages (early, late, recurrent (habitual), threatened, inevitable, complete, incomplete, missed).

3. Methods for examining women with miscarriage. Pregravid preparation. Basic principles of prevention and treatment of threatened miscarriage. Diagnosis and treatment of threatened premature birth. Cervical insufficiency.

4. Modern methods of contraception. Hormonal contraception (combined oral contraceptives, parenteral methods of using combined estrogen-gestagen drugs, oral gestagen contraceptives, parenteral gestagen drugs, hormonal-containing intrauterine system "Mirena". Emergency contraception. Intrauterine contraception. Traditional methods of contraception: barrier – chemical (spermicides) and mechanical (condoms, vaginal diaphragms, cervical caps). Physiological methods of contraception. Male contraception. Surgical methods of contraception (sterilization). Adolescent contraception. Postpartum contraception. Contraception after induced abortion. Choosing the optimal method of contraception.

Standard for mastering the topic.

After completing the lesson, the student should know:

1. The problem of miscarriage (clinical forms, etiology, pathogenesis, clinical symptoms, diagnostics and treatment of early and late spontaneous abortions, premature birth).

2. Methods of examining women with miscarriage, basic principles of prevention and treatment of threatened miscarriage.

3. Early abortion techniques and methods of late pregnancy termination.

4. Possible complications of abortion, their prevention and treatment.

5. Modern methods of contraception.

Should be able to:

1. Recognize various forms of miscarriages and prescribe treatment, including etiopathogenetic drugs.

2. Prescribe treatment for complications of abortion surgery.

3. Select the most appropriate method of contraception and teach the patient how to use it.

Questions for self-study.

1. Definition of the concept of "miscarriage", "recurrent miscarriage".
2. What is early and late spontaneous abortion?
3. Frequency of miscarriage.
4. Etiology and pathogenesis of miscarriage.
5. The role of genetic factors in miscarriage.
6. What neuroendocrine causes of miscarriage do you know?
7. What is cervical insufficiency?

8. Infectious factors of miscarriage.
9. Methods for examining women with miscarriage.
10. Basic principles of prevention and treatment of threatened miscarriage.
11. Medical abortion technique in early pregnancy.
12. Methods for terminating pregnancy in later stages.
13. Possible complications of abortion, their prevention and treatment.
14. Modern methods of contraception.

Task No. 1.

A pregnant woman at 10 weeks had a miscarriage. The fertilized egg was delivered seemingly intact. The cervical canal allows one finger to pass through. The uterus is enlarged until 7 weeks of pregnancy. Slight bleeding.

Formulate and justify the diagnosis and management plan.

Task No. 2.

A pregnant woman at 16 weeks was examined: the uterus is enlarged to 24 weeks, round, soft. The fetal heartbeat cannot be heard. The slight bleeding has appeared.

Formulate and justify the diagnosis and management plan.

Task No. 3.

A pregnant woman at 12 weeks complains of pain in the lower abdomen and slight bleeding appeared for an unknown reason.

Vaginal examination: The cervix is closed, the uterus is enlarged according to the 12 weeks of pregnancy.

Formulate and justify the diagnosis and management plan.

Task No. 4.

During an artificial abortion in the hospital (at 8 weeks of pregnancy), at the beginning of the operation the uterus was perforated by a probe in the fundus.

The general condition of the patient is satisfactory. Pulse 72 beats per minute. There are no signs of internal bleeding or peritoneal irritation.

Formulate and justify the diagnosis and management plan.

Topic 10

(4 hours)

ABNORMAL FETAL LIE (TRANSVERSE AND OBLIQUE)

Motivation: Transverse and oblique lies of the fetus are considered abnormal and occur on average in 0.5–0.7% of the total number of births. Women with four or more deliveries have a 10-fold incidence of transverse lie compared with nulliparas. The knowledge and skills acquired in the process of studying this topic will help the doctor to correctly examine pregnant women and women in labor, establish a diagnosis and choose the optimal method of delivery for abnormal fetal lie.

Purpose of the lesson.

1. Explore various options for abnormal fetal lie.
2. To study measures to correct them during pregnancy and rational management of labor with this obstetric pathology.

Lesson objectives.

1. To distinguish varieties of the fetal lie and to study the etiology of abnormal fetal lie.
2. To study the diagnostics of transverse and oblique lies of the fetus.
3. To study the course of pregnancy and labor with abnormal fetal lie and possible complications.
4. To teach students how to manage pregnancy and labor with transverse and oblique lies of the fetus, and how to choose the optimal method of delivery.
5. To study operations that correct the fetal lie during pregnancy and labor. Fetal external version. Internal podalic version vith fetal breech extraction: indications, contraindications, conditions, preoperative preparation, surgical technique, anesthesia, complications.
6. Be able to determine obstetric tactics in labor with neglected transverse lie.

Topic issues covered.

1. Various options for abnormal fetal lie (transverse, oblique), obstetric terminology.
2. Etiology of abnormal fetal lie (abdominal wall relaxation from high parity, preterm fetus, placenta previa, abnormal uterine anatomy, hydramnios, contracted pelvis).

3. Diagnostics of abnormal fetal lie using external and internal obstetric examination methods and additional examination methods.

4. The course of pregnancy and labor with abnormal fetal lie, possible complications (untimely rupture of membranes, premature birth, prolapse of the umbilical cord and small parts of the fetus, infection, hypoxia, intrapartum fetal death, neglected transverse lie of the fetus, uterine rupture, etc.).

5. Management of pregnancy and labor with transverse and oblique lies of the fetus, selection of the optimal method of delivery. The need for prenatal hospitalization. Possible indications for cesarean section.

6. Operations correcting the fetal lie during pregnancy and labor. Fetal external version. Internal podalic version vith fetal breech extraction: indications, contraindications, conditions, preoperative preparation, surgical technique, anesthesia, complications. The role of these operations in modern obstetrics.

7. Neglected transverse lie of the fetus: etiology, clinical course, diagnostics, methods of delivery.

Questions for the lecture.

Operation of fetal breech extraction (indications, contraindications, conditions, preoperative preparation, surgical technique, anesthesia, complications).

Standard for mastering the topic.

After completing the lesson, the student should know:

1. Various options for abnormal fetal lie.
2. Etiology of transverse and oblique lies of the fetus.
3. Diagnostics of abnormal fetal lie.
4. The course of pregnancy and labor with abnormal fetal lie, possible complications.
5. Management of pregnancy and labor with transverse and oblique lies of the fetus, selection of the optimal method of delivery.
6. Operations correcting the fetal lie during pregnancy and labor. Fetal external version. Internal podalic version vith fetal breech extraction: indications, contraindications, conditions, preoperative preparation, surgical technique, anesthesia, complications.
7. Delivery tactics for neglected transverse lie of the fetus.

Should be able to:

1. Examine pregnant women and women in labor using external methods.
2. Recognize varieties of abnormal fetal lie.
3. Correctly record examination data in the birth history, make a diagnosis and choose a rational method of delivery for transverse and oblique fetal lies.
4. Using a phantom, demonstrate the stages of operations of internal podalic version vith fetal breech extraction, master the indications and conditions for performing these operations.

Questions for self-study.

1. Etiology of abnormal fetal lie.
2. Methods for diagnosing abnormal fetal lie.
3. Complications during pregnancy and labor with abnormal fetal lie.
4. External version in transverse and oblique lies of the fetus. Indications, contraindications, conditions, preparation, technique, analgesia, complications.
5. Internal podalic version: indications, contraindications, conditions, preoperative preparation, surgical technique, anesthesia, complications.
6. Complications from the mother during obstetric versions.
7. Complications from the fetus during obstetric versions.
8. Operation of fetal breech extraction (indications, contraindications, conditions, preoperative preparation, surgical technique, anesthesia, complications).
9. Operation of frank breech extraction (using fingers in groins); technique (stages) and moments of surgery, complications.
10. Operation of breech extraction by one foot; technique (stages) and moments of surgery, complications.
11. Operation of breech extraction by both feet; technique (stages) and moments of surgery, complications.
12. Outcomes of the operation of fetal breech extraction for the mother.
13. Outcomes of the operation of fetal breech extraction for the fetus.
14. Neglected transverse lie of the fetus: etiology, clinical course, diagnostics, methods of delivery.

Task No. 1.

A multiparous woman, 33 years old, at 37–38 weeks of pregnancy was admitted to the maternity hospital. There was a history of 2 term births without complications and 4 medical abortions without complications. 8 hours in labor, contractions every 2–3 minutes, 45–50 seconds each, of satisfactory strength. No amniotic fluid came out.

Objectively: The dimensions of the pelvis are 26–28–31–20 cm. The circumference of the abdomen is 118 cm, the height of the fundus of the uterus above the womb is 30 cm. The lie of the fetus is transverse, the fetal head is located on the right, the breech is on the left, above the iliac crests, the back is facing the internal cervical OS. The presenting part is not determined. The fetal heartbeat is clear, rhythmic, 140 beats per minute.

Formulate and justify the diagnosis and delivery tactics.

Task No. 2.

A multiparous woman, 38 years old, was admitted to the maternity hospital at 38 weeks of pregnancy. Regular contractions for 6 hours.

History: the previous five pregnancies ended in term birth. The first four children were born in a cephalic presentation, and the fifth in a breech presentation. All children are alive. This pregnancy proceeded without complications.

Objectively: No pathological abnormalities were detected in the internal organs. Pelvic dimensions: 26–29–32–21. The circumference of the abdomen is 109 cm, the height of the fundus of the uterus above the womb is 31 cm. The abdomen is pendulous, round in shape. The presenting part is not palpable. The large, dense part of the fetus is determined on the left, above the iliac crest, the other on the right, below the iliac crest. Fetal heartbeat is auscultated on the left at the level of the navel; is clear, rhythmic, 140 beats/min. No amniotic fluid was discharged.

Vaginal examination data: The vagina corresponds to multiparous dimensions; the cervix is soft, the cervical dilatation is 8 cm. The membranes are intact. The presenting part of the fetus is not determined. The promontorium is not reachable. No pelvic deformation is detected.

Formulate and justify the diagnosis and delivery tactics.

Topic 11

(4 hours)

PREGNANCY AND DELIVERY WITH A CONTRACTED PELVIS. FETOPELVIC DISPROPORTON

Motivation: The structure, size and features of the bony pelvis have a decisive influence on the course and the outcome of childbirth. Deviations in the structure of the pelvis, especially a decrease in its size, complicate the course of labor or present insurmountable obstacles for the fetus. The problem of a contracted pelvis has not lost its relevance due to the acceleration process, an increase in the weight and height indicators of the population, an increase in the frequency of mixed forms of a contracted pelvis and an increase in the body weight of newborns. According to external pelvimetry, anatomical contracted pelvis occurs in 1.04–7.7% of cases, and fetopelvic disproportion occurs in 1.3–17% of births and is combined with an increase in the frequency of surgical delivery, perinatal and maternal morbidity and mortality. The knowledge and skills acquired in the process of studying this topic will help the doctor correctly examine pregnant women, establish a diagnosis and choose the optimal delivery tactics for a contracted pelvis.

Purpose of the lesson.

1. To study common forms of anatomical contracted pelvis, methods of diagnosing it and principles of delivery tactics, features of the biomechanism (mechanism) of labor with common forms of contracted pelvis.

2. Learn to diagnose a clinical contracted pelvis (fetopelvic disproportion), recognize possible complications in this pathology and delivery tactics.

Lesson objectives.

1. Learn the concepts of anatomical and clinical contracted pelvis.

2. Study the classification of anatomical contracted pelvis by shape and degree of contraction.

3. To study common forms of anatomical contracted pelvis and features of the biomechanism (mechanism) of labor.

4. Study the diagnostics of anatomical contracted pelvis.

5. To study the features of the course of pregnancy and labor with contracted pelvis, possible complications and delivery tactics.

6. To study the diagnosis of a clinical contracted pelvis (fetopelvic disproportion), possible complications with this pathology and delivery tactics.

Topic issues covered.

1. Concepts of anatomical and clinical contracted pelvis.

2. Anatomy of the bony pelvis. Classification of anatomical contracted pelvis by shape and degree of contraction. The value of true conjugate in diagnosing the degree of pelvic contraction and methods for its determination.

3. Common forms of anatomical contracted pelvis and features of the biomechanism (mechanism) of labor. Generally contracted pelvis (causes of occurrence, size, diagnostics, features of the biomechanism (mechanism) of labor, features of the clinical course of labor, possible complications, management of labor). Simple flat pelvis (causes of occurrence, size, diagnostics, features of the biomechanism (mechanism) of labor, asynclitism (anterior and posterior), features of the clinical course of labor, possible complications, management of labor). Flat-rachitic pelvis (causes of occurrence, size, diagnostics, features of the biomechanism (mechanism) of labor, anterior and posterior asynclitism). Transversely contracted pelvis (causes of occurrence, size, diagnostics, features of the biomechanism (mechanism) of labor, features of the clinical course of labor, possible complications, management of labor).

4. Diagnostics of a contracted pelvis. Anamnesis. General examination. Constitutional features. Height. Weight. Measuring the size of the pelvis. Measurement of Michaelis rhombus, Solovyov index. Diagonal conjugate. Calculation of the true conjugate. Dimensions of the pelvic outlet. Assessment of the degree of pelvic contraction. Diagnosis. Birth management plan. Possible complications.

5. Features of the course of pregnancy and labor with contracted pelvis, possible complications and delivery tactics.

6. Clinical contracted pelvis (fetopelvic disproportion), possible complications with this pathology and delivery tactics. Definition. Causes of clinical contracted pelvis. Conditions for diagnosing “clinical contracted pelvis”. Signs of Vasten and Zangemeister. Differential diagnosis with anomalies of labor. Evaluation of CTG for differential diagnosis of a clinical contracted pelvis and anomalies of labor. Tactics of labor management with a clinical contracted pelvis.

Questions for the lecture.

1. Concepts of anatomical and clinical contracted pelvis.

2. Anatomy of the bony pelvis. Classification of anatomical contracted pelvis by shape and degree of contraction. The value of true conjugate in diagnosing the degree of pelvic contraction and methods for its determination.

3. Common forms of anatomical contracted pelvis and features of the biomechanism (mechanism) of labor. Generally contracted pelvis (causes of occurrence, size, diagnostics, features of the biomechanism (mechanism) of labor, features of the clinical course of labor, possible complications, management of labor). Simple flat pelvis (causes of occurrence, size, diagnostics, features of the biomechanism (mechanism) of labor, asynclitism (anterior and posterior), features of the clinical course of labor, possible complications, management of labor). Flat-rachitic pelvis (causes of occurrence, size, diagnostics, features of the biomechanism (mechanism) of labor, anterior and posterior asynclitism). Transversely contracted pelvis (causes of occurrence, size, diagnostics, features of the biomechanism (mechanism) of labor, features of the clinical course of labor, possible complications, management of labor).

4. Diagnostics of a contracted pelvis. Anamnesis. General examination. Constitutional features. Height. Weight. Measuring the size of the pelvis. Measurement of Michaelis rhombus, Solovyov index. Diagonal conjugate. Calculation of the true conjugate. Dimensions of the pelvic outlet. Assessment of the degree of pelvic contraction. Diagnosis. Birth management plan. Possible complications.

5. Features of the course of pregnancy and labor with contracted pelvis, possible complications and delivery tactics.

6. Clinical contracted pelvis (fetopelvic disproportion), possible complications with this pathology and delivery tactics. Definition. Causes of clinical contracted pelvis. Conditions for diagnosing “clinical contracted pelvis”. Signs of Vasten and Zangemeister. Differential diagnosis with anomalies of labor. Evaluation of CTG for differential diagnosis of a clinical contracted pelvis and anomalies of labor. Tactics of labor management with a clinical contracted pelvis.

Standard for mastering the topic.

After completing the lesson, the student should know:

1. The role of an anatomical contracted pelvis in the clinical course and outcome of labor for the mother and fetus.

2. The importance of external and internal obstetric examination in the diagnostics of various forms and degrees of pelvic contraction.

3. The importance of additional research methods in the diagnostics of contracted pelvis.

4. Features of the structure and biomechanism (mechanism) of labor with a generally contracted pelvis.

5. Features of the structure and biomechanism (mechanism) of childbirth with varieties of flat pelvis.

6. Features of the structure and biomechanism (mechanism) of childbirth with a transversely contracted pelvis.

7. Principles of labor management and their complications with a contracted pelvis.

8. Causes and symptoms of clinical contracted pelvis (fetopelvic disproportion).

Should be able to:

1. Carefully collect anamnesis and perform an external examination of the pregnant woman, including anthropometry.

2. Assess data from external pelvimetry and internal obstetric examination.

3. Recognize different shapes and degrees of a contracted pelvis.

4. Evaluate the results of monitoring fetal well-being, calculate the estimated fetal weight and choose the method of delivery.

5. Establish a fetopelvic disproportion, determine delivery tactics.

Questions for self-study.

1. Definition of the concept of anatomical and clinical contracted pelvis.

2. Indicate the reasons for the formation of a contracted pelvis.

3. Classification of anatomical contracted pelvis.

4. Specify methods for diagnosing an anatomical contracted pelvis.

5. Features of the structure and biomechanism (mechanism) of labor with a generally contracted pelvis.

6. Features of the structure and biomechanism (mechanism) of labor with varieties of flat pelvis (simple flat, flat-rachitic).

7. Features of the structure and biomechanism (mechanism) of labor with a transversely contracted pelvis.

8. Complications of childbirth due to pelvic anomalies.

9. Formulate the principles of labor management with a contracted pelvis.

10. Indicate the causes and symptoms of a clinical (functional) contracted pelvis (fetopelvic disproportion).

Task No. 1.

A multiparous woman, 34 years old, with a complicated obstetric history (7 medical abortions). Pelvic dimensions: 26–28–32–20 cm, the fetal lie is longitudinal, the presenting part is the head, engaged to the pelvic inlet. Fetal heart sounds are clear, rhythmic, 146–148 beats per minute. Labor lasts 10 hours, contractions every 2 minutes, 40 seconds, painful. Anhydrous interval is 6 hours. Vasten's sign is positive. The

contraction ring is at the level of the navel, located obliquely, the lower segment is painful on palpation.

During vaginal examination: The uterine cervix is fully dilatated, the facial line is in the right oblique diameter of pelvic inlet, the chin (mentum) is palpated posteriorly, the forehead is palpated anteriorly. The promontorium is not reachable.

What is your diagnosis? Principles of labor management? Possible complications for the mother? Prognosis for the fetus? What should this type of head presentation be differentiated from?

Task No. 2.

A multiparous woman was admitted to the maternity hospital with a full-term pregnancy, with regular labor within 3 hours. Amniotic fluid leaked an hour ago. Second pregnancy, second birth. In the first birth 4 years ago, a live, full-term baby was born, weighing 4200. Pelvic dimensions: 25–29–32–21 cm. The circumference of the abdomen is 101 cm, the height of the fundus of the uterus above the womb is 37 cm. At the time of examination, contractions were 2–3 minutes for 35–40 seconds, of satisfactory strength. The fetal lie is longitudinal, the presenting part is the head, engaged to the pelvic inlet. Fetal heart sounds are clear, rhythmic, 136–140 beats per minute.

During vaginal examination: The cervix is soft, the cervical dilatation is 9 cm. The membranes are ruptured. The presenting part is the head, engaged to the pelvic inlet. Small (posterior) fontanel is palpated on the left, large (anterior) fontanel on the right, sagittal suture is located in the transverse diameter of the pelvic inlet and is deflected anteriorly towards the symphysis, the posterior parietal bone is lower than the anterior one. During a contraction there is no tendency for the head to descend. There is a moderate birth tumor on the head. The pelvis is capacious, the promontorium is not reachable.

What is your diagnosis? Principles of labor management? What does the lack of head descent during a contraction indicate?

Topic 12

(4 hours)

BIRTH TRAUMA OF MOTHER AND FETUS

Motivation: The knowledge and skills acquired in the process of studying this topic will help the doctor to correctly diagnose, provide assistance and carry out prevention of the main types of birth injuries of the mother and fetus.

Purpose of the lesson.

1. Study the causes of maternal birth trauma.
2. Learn to recognize and provide assistance with ruptures of the vagina, cervix, perineum, uterus, hematomas, genitourinary and enterogenital fistulas.
3. Learn to diagnose, treat and prevent various types of fetal injuries.

Lesson objectives.

1. To study the etiology, pathogenesis, clinical picture, and obstetric tactics for perineal lacerations.
2. To study the etiology, pathogenesis, clinical picture, and obstetric tactics for cervical lacerations.
3. To study the etiology, pathogenesis, clinical picture, and obstetric tactics for hematomas of the external genitalia and vagina.
4. To study the etiology, pathogenesis, clinical picture, and obstetric tactics for uterine ruptures.
5. To study the etiology, pathogenesis, clinical picture, and obstetric tactics for acute uterine inversion.
6. To study the etiology, pathogenesis, clinical picture, and obstetric tactics for sprains and ruptures of the pelvic joints.
7. To study the etiology, pathogenesis, clinical picture, obstetric tactics for genitourinary and enterogenital fistulas.
8. To study the etiology, pathogenesis, clinical picture, medical tactics and prevention of birth injuries of the fetus and newborn (damage to the central and peripheral nervous system, skeleton and muscles).

Topic issues covered.

1. Causes of birth trauma in mother and fetus.
2. Etiology, pathogenesis, clinical picture, classification, medical tactics for perineal and vaginal lacerations. Symptoms of a threatening perineal rupture. Perineotomy and episiotomy technique. Technique for

suturing I–III degree perineal lacerations. Management of the postoperative period for ruptures of the vagina and perineum.

3. Etiology, pathogenesis, clinical picture, medical tactics for cervical lacerations. Spontaneous and violent cervical lacerations. Technique for examining the cervix. Degree of injuries to the cervix. Technique for suturing lacerations.

4. Etiology, pathogenesis, clinical picture, medical tactics for hematomas of the external genitalia and vagina.

5. Etiology, pathogenesis, clinical picture, classification of uterine rupture. Pathogenetic theories of uterine rupture. Threatening, incipient and completed uterine rupture. Technique of basic operations used for uterine rupture.

6. Etiology, clinical picture, medical tactics for acute uterine inversion.

7. Etiology, clinical picture, medical tactics for sprains and ruptures of the pelvic joints. Clinic and treatment of symphysiopathy.

8. Etiology, clinical picture, medical tactics, prevention of postpartum fistulas.

9. Etiology and pathogenesis, diagnostic methods, prevention and treatment, long-term consequences of hypoxia and birth injuries of the fetus and newborn. Injuries to the central and peripheral nervous system, skeleton and muscles. Causes, clinical picture, diagnosis and treatment of cephalohematoma. Causes and treatment of clavicle fracture. Causes of shoulder dystocia, basic techniques used for shoulder dystocia. Erb's paresis.

Questions for the lecture.

1. Main quality indicators of the work of an obstetric hospital.

2. Definition of birth injuries, frequency of major birth injuries to the mother.

3. Perineal lacerations: etiology, classification, clinic, medical tactics, prevention. Technique for suturing I–III degree perineal rupture. Perineotomy and episiotomy technique.

4. Cervical lacerations: etiology, classification, clinical picture, medical tactics, prevention.

5. Uterine rupture: etiology, classification, pathogenesis, clinical picture, medical tactics, prevention. Threatening, incipient and completed uterine rupture. Surgical treatment for uterine rupture. Principles of organ-preserving operations. Subtotal hysterectomy (supravaginal amputation) and total hysterectomy (extirpation).

6. Genitourinary and enterogenital fistulas: etiology, pathogenesis, classification, clinical picture, diagnosis, treatment and prevention.

7. Classification of birth injuries of the fetus and newborn (injuries to the central and peripheral nervous system, damage to the skeleton and muscles). Causes, clinical picture, diagnosis and treatment of cephalohematoma, clavicle fracture. Causes of shoulder dystocia, basic techniques used for shoulder dystocia. Erb's paresis.

Standard for mastering the topic.

After completing the lesson, the student should know:

1. Causes of birth trauma in mother and fetus.

2. Etiology, pathogenesis, clinical picture, medical tactics for various types of maternal birth trauma.

3. Etiology, pathogenesis, clinical picture, medical tactics and prevention of birth trauma to the fetus.

Should be able to:

1. Diagnose lacerations of the cervix, vagina, perineum and provide assistance with maternal birth injuries.

2. Diagnose the threat of uterine rupture.

3. To choose the optimal delivery tactics to prevent birth trauma due to obstetric complications.

4. Make a diagnosis and determine the necessary measures for the prevention and treatment of birth injuries of the fetus and newborn.

Questions for self-study.

1. Causes of uterine rupture.
2. Classification of uterine rupture.
3. Clinic for threatening uterine rupture.
4. Clinic of incipient uterine rupture.
5. Uterine rupture clinic.
6. Treatment of threatened uterine rupture.
7. Treatment of incipient uterine rupture.
8. Treatment of completed uterine rupture.
9. Causes of cervical lacerations.
10. Classification of cervical lacerations.
11. Methods for suturing cervical lacerations.
12. Classification of perineal lacerations.
13. Perineal rupture clinic.
14. Technique for suturing I–II degree perineal rupture.
15. Technique for suturing a 3rd degree perineal rupture.

16. Management of the postoperative period for ruptures of the cervix, vagina and perineum.
17. Diagnosis and treatment of postpartum hematomas.
18. Diagnosis, treatment and prevention of postpartum fistulas.
19. Causes of cephalohematoma formation.
20. Treatment of cephalohematoma.
21. Causes of clavicle fractures in newborns.
22. Possible causes of facial nerve paresis and Erb's palsy in a newborn.
23. Causes of shoulder dystocia. Techniques for expelling shoulders.

Task No. 1.

A woman was delivered to the maternity hospital in the second stage of labor. Neglected transverse lie of the fetus with fetal arm prolapse was diagnosed. The fetal heartbeat cannot be heard.

Formulate and justify the diagnosis. What method of delivery is possible in this situation?

Task No. 2.

A woman at 41 weeks of pregnancy is in the second stage of labor for 1 hour. Fourth birth.

Objectively: Contractions every 3 minutes for 35–40 seconds, of satisfactory strength. The dimensions of the pelvis are 25–28–31–20 cm. The lie of the fetus is longitudinal, the presenting part is the head, engaged to the pelvic inlet. The estimated fetal weight is 4200 g. The fetal heartbeat is clear, rhythmic, 160 beats per minute.

Vaginal examination: The cervix is fully dilatated, the fetal head is engaged to the pelvic inlet. The bones of the fetal skull are dense, sutures and fontanelles are difficult to identify, small (posterior) fontanel is palpated on the left, large (anterior) fontanel on the right, sagittal suture is located in the transverse diameter of the pelvic inlet and is deflected anteriorly towards the symphysis. The promontorium is unreachable. Leaking amniotic fluid is stained with meconium.

Formulate and justify the diagnosis and delivery tactics.

Task No. 3.

A 16-year-old woman at 41–42 weeks of pregnancy was admitted to the maternity hospital to determine the method of delivery. The first pregnancy, no complications.

Objectively: Estimated fetal weight 4200 g, pelvic dimensions 23–26–29–18 cm, cephalic presentation.

During vaginal examination: The cervix is 2.5 cm long, dense, is located posteriorly, the external cervical os is closed.

Formulate and justify the diagnosis and delivery tactics.

Task No. 4.

A multiparous woman with a full-term pregnancy was admitted to the maternity hospital with complaints of rupture of membranes. History: 3 years ago, cesarean section due to chronic fetal hypoxia. The postoperative period was complicated by suppuration and complete dehiscence of the suture on the anterior abdominal wall. Healing by secondary intention.

Objectively: There is no regular labor activity. The pelvis dimensions are normal. There is a postoperative scar on the anterior abdominal wall, the scar area is painful on palpation, the scar is partially fused to the underlying tissues. The lie of the fetus is longitudinal, the presenting part is the head, engaged to the pelvic inlet. The fetal heartbeat is clear, rhythmic, up to 140 beats/min. Estimated fetal weight is 3500 g.

During vaginal examination: The cervix is up to 1.5 cm long, soft, the cervical canal is dilated by 2 cm. There is no amniotic sac. The presenting part is the head, engaged to the pelvic inlet.

Formulate and justify the diagnosis and delivery tactics.

Topic 13

(8 hours)

BLEEDING IN THE SECOND HALF OF PREGNANCY. PLACENTA PREVIA. PLACENTAL ABRUPTION

Motivation: One of the most common and serious complications of pregnancy, labor and the postpartum period is obstetric hemorrhage. Bleeding in the second half of pregnancy is observed in 2–3% of women, in about half of them the causes of bleeding are placenta previa and placental abruption. Maternal hemorrhage increases both the incidence of serious maternal complications and perinatal losses. The knowledge and skills acquired in the process of studying this topic will help the doctor correctly examine pregnant women and women in labor, establish a diagnosis and choose the optimal method of delivery for this pathology.

Purpose of the lesson.

1. Learn to identify the causes of bleeding before the birth of the fetus, especially with placenta previa and placental abruption.

2. Learn diagnostic methods and rational management of pregnancy and childbirth with placenta previa and placental abruption

Lesson objectives.

1. Explore possible causes of bleeding in the second half of pregnancy.

2. Study placenta previa: definition, classification, etiology and associated factors, diagnosis, clinical course of pregnancy and labor, treatment (conservative and surgical), choice of delivery method, prevention of placenta previa.

3. Study placental abruption: definition, etiology associated factors, pathogenesis, diagnosis, clinical course of pregnancy and labor, treatment (conservative and surgical), choice of delivery method, prevention of placental abruption.

4. Learn obstetric tactics for hemorrhagic shock and DIC in these conditions.

Topic issues covered.

1. Causes of bleeding in the second half of pregnancy (cervical ectopia, polyps, cervical and vaginal cancer, ruptures of vaginal varicose nodes, vaginal trauma, ruptures of umbilical cord vessels with their membrane attachment, late spontaneous abortion or premature birth, uterine rupture due to scar incompetence, placenta previa and placental abruption).

2. Placenta previa. Definition of the concept, frequency of placenta previa. Classification of placental location anomalies (total, partial, marginal

placenta previa, low-lying placenta, vasa previa; complete and incomplete placenta previa), etiological factors, clinical symptoms, diagnostics of placenta previa. Complications during pregnancy and labor, treatment (conservative and surgical), obstetric tactics for placenta previa, prevention.

3. Placental abruption. Definition of the concept, frequency of placental abruption. Etiological factors (predisposing conditions and factors directly causing placental abruption), pathogenetic mechanisms of development of DIC syndrome, uteroplacental apoplexy (Couvelaire uterus). Clinical symptoms, severity, diagnosis, differential diagnosis of placental abruption. Treatment, choice of delivery method, prevention.

4. Hemorrhagic shock and disseminated intravascular coagulation syndrome with placental abruption and previa. Objective assessment of blood loss and coagulation disorders. Clinical stages of hemorrhagic shock. Measures to stop obstetric hemorrage (correction of consumptive coagulopathy, infusion-transfusion therapy, intraoperative reinfusion of washed autoerythrocytes (Cell saver), uterine artery ligation, ovarian artery ligation, internal iliac artery ligation, uterine compression sutures, angiographic embolization of the uterine vessels).

Questions for the lecture.

1. Causes of bleeding in the second half of pregnancy (cervical ectopia, polyps, cervical and vaginal cancer, ruptures of vaginal varicose nodes, vaginal trauma, ruptures of umbilical cord vessels with their membrane attachment, late spontaneous abortion or premature birth, uterine rupture due to scar incompetence, placenta previa and placental abruption).

2. Placenta previa. Definition of the concept, frequency of placenta previa. Classification of placental location anomalies (total, partial, marginal placenta previa, low-lying placenta, vasa previa; complete and incomplete placenta previa), etiological factors, clinical symptoms, diagnostics of placenta previa. Complications during pregnancy and labor, treatment (conservative and surgical), obstetric tactics for placenta previa, prevention.

3. Placental abruption. Definition of the concept, frequency of placental abruption. Etiological factors (predisposing conditions and factors directly causing placental abruption), pathogenetic mechanisms of development of DIC syndrome, uteroplacental apoplexy (Couvelaire uterus). Clinical symptoms, severity, diagnosis, differential diagnosis of placental abruption. Treatment, choice of delivery method, prevention.

4. Hemorrhagic shock and disseminated intravascular coagulation syndrome with placental abruption and previa. Objective assessment of blood loss and coagulation disorders. Clinical stages of hemorrhagic shock. Measures to stop obstetric hemorrage (correction of consumptive coagulopathy, infusion-transfusion therapy, intraoperative reinfusion of washed autoerythrocytes (Cell saver), uterine artery ligation, ovarian artery ligation, internal iliac artery ligation, uterine compression sutures, angiographic embolization of the uterine vessels).

Standard for mastering the topic.

After completing the lesson, the student should know:

1. Causes of bleeding in the second half of pregnancy.
2. Placenta previa: definition, classification, etiology, diagnosis, clinical course of pregnancy and labor, treatment (conservative and surgical), choice of delivery method, prevention.
3. Placental abruption: definition, etiology, pathogenesis, diagnosis, clinical course of pregnancy and labor, treatment (conservative and surgical), choice of delivery method, prevention.
4. Hemorrhagic shock and disseminated intravascular coagulation syndrome with placental abruption and previa.

Should be able to:

1. Based on the medical history, the patient's complaints, objective examination and additional examination methods, diagnose placenta previa or placental abruption.
2. Assess the condition of a pregnant woman or woman in labor and draw up a plan for managing pregnancy or labor.
3. Determine indications for conservative and surgical treatment for placenta previa and placental abruption.
4. Objectively assess the volume of blood loss and coagulation disorders, determine measures to stop bleeding, determine the blood group, prescribe adequate infusion and transfusion therapy.

Questions for self-study.

1. Causes of bleeding in the second and third trimesters of pregnancy.
2. Causes of placenta previa.
3. Classification of placental location anomalies.
4. Symptoms of placenta previa.
5. Determination of placenta previa.
6. Diagnostics of placenta previa.
7. Treatment methods for complete placenta previa.
8. Methods of delivery for incomplete placenta previa.
9. Complications for the fetus with placenta previa.

10. Factors associated with placental abruption.
11. Pathogenesis of placental abruption.
12. Methods for diagnosing placental abruption.
13. What is "Couvelaire uterus"?
14. Methods of delivery for placental abruption.
15. Complications in mother and fetus with placental abruption.

Task No. 1.

A 32-year-old multiparous woman was admitted in labor. Contractions at the time of admission are every 2–3 minutes, 35 seconds each. No amniotic fluid was discharged. The presenting part is the head, located in the plane of greatest pelvic dimension. This pregnancy was complicated by preeclampsia during the last month, periodic increase in blood pressure to 180–200/100 mmHg. Urine tests without pathology.

During vaginal examination: The cervix is fully dilatated. The membranes are intact. The head is in the plane of greatest pelvic dimension.

Suddenly the woman in labor turned pale, vomiting and severe bursting pain in the lower abdomen appeared. Pulse 100 bpm, blood pressure 140/110 mmHg. The uterus has taken on an asymmetrical shape due to protrusion of its left corner; palpation of the uterus is painful. The fetal heartbeat is dull, arrhythmic, 90–100 beats per minute. There is no external bleeding.

Formulate and justify the diagnosis and delivery tactics. What determines the delivery tactics for this complication?

Task No. 2.

A 25-year-old pregnant woman was delivered to a maternity hospital by ambulance with complaints of heavy bleeding from the genital tract, which occurred suddenly with the onset of labor. The gestational age is 40 weeks.

Formulate and justify the diagnosis and delivery tactics.

Task No. 3.

A 29-year-old multiparous woman in labor for 7 hours was admitted with bleeding to a maternity hospital. Fourth birth. Pulse 100 bpm, medium filling, pale skin and mucous membranes. Pelvic dimensions: 26–28–31–20 cm. Contractions of medium strength, 30–40 seconds every 3–4 minutes, the presenting head is freely movable above the pelvic inlet ("floating"). Fetal heart sounds are clear, rhythmic, 132 per minute.

During vaginal examination: The cervix is soft, the cervical dilatation is 5 cm. 2/3 of the uterine os is covered by placental tissue, and the remaining area is covered by membranes. There are a lot of blood clots in the vagina.

Formulate and justify the diagnosis and delivery tactics.

Topic 14

(8 hours)

HEMORRHAGE IN THE THIRD STAGE OF LABOR AND EARLY POSTPARTUM PERIOD

Motivation: One of the main reasons in the structure of maternal mortality is postpartum hemorrhage. In recent years, it has been possible to reduce mortality from massive obstetric hemorrhage through the introduction of new methods of stopping bleeding and compensating blood loss. The knowledge and skills acquired in the process of studying this topic will help the doctor correctly examine pregnant women, women in labor and postpartum, establish a diagnosis and provide emergency care for obstetric hemorrhage.

Purpose of the lesson.

1. To study the etiology, pathogenesis, clinical symptoms, diagnostics and treatment of third-stage bleeding and early postpartum hemorrage.

2. To study the mechanism of development of hemorrhagic shock and DIC syndrome, its stages, diagnosis and treatment.

Lesson objectives.

1. To study possible causes of bleeding in the third stage of labor and early postpartum period.

2. To study hypotonic bleeding: definition, classification, etiology, diagnostics, obstetric tactics, prevention.

3. To learn to determine obstetric tactics for hypotonic and atonic bleeding, massive blood loss, hemorrhagic shock and disseminated intravascular coagulation syndrome.

4. To learn conservative and surgical methods to stop obstetric hemorrhage.

Topic issues covered.

1. Prevention of bleeding in the third stage of labor and early postpartum, sequence of measures. Determination of physiological blood loss during childbirth.

2. Causes of bleeding in the third stage of labor and early postpartum period. Causes associated with disruption of the contractile function of the uterus (overstretching of the uterus, “exhaustion” of the contractility of the myometrium, infection, anatomical/functional features of the uterus, retention of parts of the placenta, retention of blood clots in the

uterine cavity). Injuries of the uterus and birth canal (ruptures of the cervix, vagina, perineum, traumatic uterine rupture during cesarean section, uterine rupture, uterine inversion). Coagulation disorders (congenital blood diseases, acquired blood diseases during pregnancy, treatment with anticoagulants and drugs that affect platelets).

3. Methods for assessing the amount of blood loss and coagulation disorders. Physiological blood loss, pathological blood loss, massive blood loss. Estimation of blood loss: visual method, gravimetric method, determination with a measuring container. Emergency determination of the coagulation state (Lee-White test), analysis of thromboelastogram data.

4. Causes, clinical picture, diagnosis and treatment (sequence of measures) of third-stage bleeding as the result of transient partial separation of the placenta. Hypotony of the uterus, partial separation of the placenta, placenta defect, partial placenta accreta. Prolonged third stage. Technique of manual placental removal and manual examination of the uterine wall.

5. Clinic, diagnosis and treatment of bleeding (sequence of measures) associated with injuries of the uterus and birth canal. Ruptures of the cervix, vagina, perineum, traumatic uterine rupture during cesarean section, uterine rupture, uterine inversion.

6. Causes, clinical picture, diagnosis and treatment of bleeding (sequence of measures) associated with impaired contractility of the uterus. Overstretching of the uterus, "exhaustion" of myometrial contractility, infection, anatomical/functional features of the uterus, retention of parts of the placenta, retention of blood clots in the uterine cavity. Manual examination of the uterus, bimanual compression of the uterus, administration of uterotonics, clamping of the uterine arteries according to Baksheev, intrauterine hemostatic balloon, compression of the abdominal aorta. Correction of coagulation status, infusion-transfusion therapy, intraoperative reinfusion of washed autoerythrocytes (Cell saver), uterine artery ligation, ovarian artery ligation, internal iliac artery ligation, uterine compression sutures, angiographic embolization of the uterine vessels.

7. Causes, clinical picture, diagnosis and treatment of coagulopathic hemorrhage. Congenital blood diseases (hemophilia A, von Willebrand disease), acquired blood diseases during pregnancy (idiopathic thrombocytopenia, thrombocytopenia in DIC), treatment with anticoagulants and drugs

that affect platelets (iatrogenic hypocoagulation). Fresh frozen plasma, fibrinolysis inhibitors, recombinant activated coagulation factor VIIa.

8. Hemorrhagic shock and disseminated intravascular coagulation syndrome in the third-stage and early postpartum bleeding. Objective assessment of blood loss and coagulation disorders. Clinical stages of hemorrhagic shock. Measures to stop bleeding (correction of coagulopathy, infusion-transfusion therapy, intraoperative reinfusion of washed autoerythrocytes (Cell saver), uterine artery ligation, ovarian artery ligation, internal iliac artery ligation, uterine compression sutures, angiographic embolization of the uterine vessels).

Questions for the lecture.

1. Causes of bleeding in the third stage of labor and early postpartum period. Causes associated with disruption of the contractile function of the uterus (overstretching of the uterus, "exhaustion" of the contractility of the myometrium, infection, anatomical/functional features of the uterus, retention of parts of the placenta, retention of blood clots in the uterine cavity). Injuries of the uterus and birth canal (ruptures of the cervix, vagina, perineum, traumatic uterine rupture during cesarean section, uterine rupture, uterine inversion). Coagulation disorders (congenital blood diseases, acquired blood diseases during pregnancy, treatment with anticoagulants and drugs that affect platelets).

2. Methods for assessing the amount of blood loss and coagulation disorders. Physiological blood loss, pathological blood loss, massive blood loss. Estimation of blood loss: visual method, gravimetric method, determination with a measuring container. Emergency determination of the coagulation state (Lee-White test), analysis of thromboelastogram data.

3. Causes, clinical picture, diagnosis and treatment (sequence of measures) of third-stage bleeding as the result of transient partial separation of the placenta. Hypotony of the uterus, partial separation of the placenta, placenta defect, partial placenta accreta. Prolonged third stage. Technique of manual placental removal and manual examination of the uterine wall.

4. Clinic, diagnosis and treatment of bleeding (sequence of measures) associated with injuries of the uterus and birth canal. Ruptures of the cervix, vagina, perineum, traumatic uterine rupture during cesarean section, uterine rupture, uterine inversion.

5. Causes, clinical picture, diagnosis and treatment of bleeding (sequence of measures) associated with impaired contractility of the uterus.

Overstretching of the uterus, "exhaustion" of myometrial contractility, infection, anatomical/functional features of the uterus, retention of parts of the placenta, retention of blood clots in the uterine cavity. Manual examination of the uterus, bimanual compression of the uterus, administration of uterotonics, clamping of the uterine arteries according to Baksheev, intrauterine hemostatic balloon, compression of the abdominal aorta. Correction of coagulation status, infusion-transfusion therapy, intraoperative reinfusion of washed autoerythrocytes (Cell saver), uterine artery ligation, ovarian artery ligation, internal iliac artery ligation, uterine compression sutures, angiographic embolization of the uterine vessels.

6. Causes, clinical picture, diagnosis and treatment of coagulopathic hemorrhage. Congenital blood diseases (hemophilia A, von Willebrand disease), acquired blood diseases during pregnancy (idiopathic thrombocytopenia, thrombocytopenia in DIC), treatment with anticoagulants and drugs that affect platelets (iatrogenic hypocoagulation). Fresh frozen plasma, fibrinolysis inhibitors, recombinant activated coagulation factor VIIa.

7. Hemorrhagic shock and disseminated intravascular coagulation syndrome in the third-stage and early postpartum bleeding. Objective assessment of blood loss and coagulation disorders. Clinical stages of hemorrhagic shock. Measures to stop bleeding (correction of coagulopathy, infusion-transfusion therapy, intraoperative reinfusion of washed autoerythrocytes (Cell saver), uterine artery ligation, ovarian artery ligation, internal iliac artery ligation, uterine compression sutures, angiographic embolization of the uterine vessels).

Standard for mastering the topic.

After completing the lesson, the student should know:

1. Prevention of bleeding in the third stage of labor and early postpartum period.

2. Causes of bleeding in the third stage of labor and early postpartum period.

3. Causes, clinical picture, diagnosis and treatment (sequence of measures) of third-stage bleeding as the result of transient partial separation of the placenta.

4. Causes, clinical picture, diagnosis and treatment of bleeding (sequence of measures) associated with impaired contractility of the uterus.

5. Clinic, diagnosis and treatment of bleeding (sequence of measures) associated with injuries of the uterus and birth canal.

6. Clinic, diagnosis and treatment of coagulopathic hemorrhage.

7. Hemorrhagic shock and disseminated intravascular coagulation syndrome in the third-stage and postpartum bleeding.

8. The technique of manual placental removal and manual examination of the uterine wall.

Should be able to:

1. Diagnose bleeding in the third stage of labor and early postpartum period.

2. Diagnose hemorrhagic shock, DIC syndrome.

3. Carry out manipulation of intravenous administration of drugs, external massage of the uterus, examination of the birth canal using mirrors.

4. Prevent bleeding in the third stage of labor and early postpartum period.

5. Objectively assess the volume of blood loss and coagulation disorders, determine measures to stop bleeding, determine the blood group, and prescribe adequate infusion and transfusion therapy.

Questions for self-study.

1. What is the physiological blood loss during childbirth?
2. What is true placenta accreta?
3. List the causes of third-stage bleeding.
4. Symptoms of hypotonic bleeding.
5. What diseases should hypotonic bleeding be differentiated from?
6. List the causes of bleeding in the early postpartum period.
7. What measures should be taken in case of hypotonic bleeding?
8. What measures should be taken in case of true placenta accreta?
9. Symptoms of DIC syndrome.
10. The mechanism of development of DIC syndrome.
11. Algorithm for a doctor's actions in case of early postpartum hemorrhage.

Task No. 1.

A 34-year-old woman gave birth to her second child. From the anamnesis: this is the fifth pregnancy. The first ended in an emergency live birth. The next three were medical abortions, the last one was complicated by endometritis.

2 hours have passed since the baby was born. There is slight bleeding from the genital tract. There are no signs of separation of the placenta.

Formulate and justify the diagnosis and medical tactics.

Was the third stage of labor managed correctly in this situation?

Task No. 2.

A 30-year-old woman in labor. Pregnancy 6, childbirth 2. The first birth was preceded by 3 medical abortions. From the anamnesis: during the first birth there was third-stage bleeding, manual placental removal was performed, the postpartum period was complicated by endometritis, she was discharged from the hospital on the 11th day.

The birth was delivered as a live boy, 4000 g. The duration of the first and second stages of labor was 3 hours. In the third stage of labor, without signs of placental separation, bleeding began. When the blood loss was 300 ml, the manual placental removal was performed. After removal of the placenta, the uterus remains soft, contracts poorly, and bleeding continues. Blood loss is 700 ml.

Formulate and justify the diagnosis and medical tactics.

Topic 15

(8 hours)

EARLY TOXICOSIS OF PREGNANCY. PREECLAMPSIA, ECLAMPSIA

Motivation: Obtaining theoretical and practical information on the etiology, pathogenesis, clinical course, treatment and prevention of early toxicosis of pregnancy, preeclampsia, eclampsia. The knowledge and skills acquired in the process of studying this topic will help the doctor to correctly examine pregnant women, women in labor and postpartum, establish a diagnosis and provide emergency care for preeclampsia and eclampsia, thereby preventing serious complications of this pregnancy complications.

Purpose of the lesson: Study of the etiology, pathogenesis, clinical picture of early toxicosis, preeclampsia and eclampsia, methods of diagnosis and treatment, prevention of this pathology.

Lesson objectives.

1. To study the etiology, pathogenesis, classification according to the clinical picture, diagnostic methods, indications for termination of pregnancy, treatment principles of various forms of early toxicosis (salivation (ptyalism), vomiting of pregnancy (hyperemesis gravidarum), chorea of pregnancy (chorea gravidarum), osteomalacia, dermatoses, acute yellow liver of pregnancy, bronchial asthma of pregnancy).
2. To study the etiology, pathogenesis, classification, clinical picture of preeclampsia and eclampsia, methods of diagnosis and treatment, prevention.

Topic issues covered.

1. Definition of the concept of early toxicosis, preeclampsia, eclampsia.
2. Clinical picture, diagnostics, treatment of common forms of early toxicosis – vomiting of pregnancy, salivation (ptyalism).
3. Clinical picture, diagnostics, treatment of rare forms of early toxicosis – dermatoses of pregnancy, osteomalacia of pregnancy, chorea of pregnancy, acute yellow liver of pregnancy.
4. Etiology and pathogenesis of preeclampsia, eclampsia. Generalized vasospasm and endothelial dysfunction as the main pathogenetic mechanisms of preeclampsia.

5. Classification of hypertensive disorders in pregnancy. Clinical pictute, diagnostics, treatment of chronic arterial hypertension, gestational arterial hypertension, preeclampsia. Basic therapy for severe preeclampsia (anticonvulsant therapy, antihypertensive therapy, delivery). Basic principles of labor management. Cholestatic hepatosis of pregnancy (intrahepatic cholestasis of pregnancy).

6. Critical forms of preeclampsia (severe retinopathy, acute fatty hepatosis, HELLP syndrome, acute renal failure, pulmonary edema, eclampsia).

7. Prevention of preeclampsia.

Questions for the lecture.

1. Study of the etiology of early toxicosis of pregnancy, preeclampsia, eclampsia.

2. Study of the pathogenesis of early toxicosis of pregnancy, preeclampsia, eclampsia.

3. Study of the classification of early toxicosis of pregnancy, preeclampsia, eclampsia.

4. Consideration of methods for diagnosing various forms of early toxicosis of pregnancy, preeclampsia, eclampsia.

5. Principles of treatment of various forms of early toxicosis of pregnancy, preeclampsia, eclampsia.

6. Indications for termination of pregnancy in early toxicosis.

7. Complications of severe forms of preeclampsia (acute renal, liver failure, placental abruption, retinal detachment, cerebral hemorrhage, fetal hypoxia).

8. Perinatal morbidity and mortality in preeclampsia.

Standard for mastering the topic.

After completing the lesson, the student should know:

1. Common forms of early toxicosis (salivation and vomiting of pregnancy).

2. Rare forms of early toxicosis (chorea of pregnancy, osteomalacia, dermatoses, acute yellow liver of pregnancy, bronchial asthma of pregnancy).

3. Etiology and pathogenesis of vomiting of pregnancy, classification according to the clinical picture, diagnostic methods, principles of treatment, indications for termination of pregnancy.

4. Etiology, pathogenesis, clinical picture of preeclampsia, eclampsia, methods of diagnosis and treatment, prevention.

Should be able to:

Based on complaints, anamnesis, clinical picture, additional examination methods, make a diagnosis and determine the severity of early toxicosis, preeclampsia, and draw up a treatment plan.

Questions for self-study.

1. What is early toxicosis of pregnancy?
2. What is preeclampsia, eclampsia?
3. Name the main forms of early toxicosis of pregnancy.
4. Frequency of occurrence of early toxicosis of pregnancy, preeclampsia, eclampsia.
5. Etiology and pathogenesis of early toxicosis (salivation, vomiting of pregnancy, chorea of pregnancy, osteomalacia, dermatoses, acute yellow liver of pregnancy, bronchial asthma of pregnancy).
6. Etiology and pathogenesis of preeclampsia, eclampsia.
7. Classification of vomiting of pregnancy according to severity.
8. Clinical course for mild vomiting of pregnancy.
9. Clinical course for moderate vomiting of pregnancy.
10. Clinical course for severe vomiting of pregnancy.
11. Scope of treatment for mild vomiting of pregnancy.
12. Scope of treatment for moderate vomiting of pregnancy.
13. Scope of treatment for severe vomiting of pregnancy.
14. Indications for termination of pregnancy in case of vomiting of pregnant women.
15. Prevention of early toxicosis.
16. Classification of hypertensive disorders in pregnancy.
17. Clinical course of hypertensive disorders in pregnancy.
18. Differential diagnosis of hypertensive disorders in pregnancy.
19. Treatment of chronic arterial hypertension in pregnancy.
20. Treatment of preeclampsia and eclampsia.
21. Diagnostics and treatment of critical forms of preeclampsia.

Task No. 1.

A 27-year-old primigravida was brought by ambulance to a maternity hospital after an attack of eclampsia that occurred at home.

Objectively: Pregnancy is 37–38 weeks, the condition is serious, consciousness is inhibited. The skin is pale, there is pronounced swelling of the legs, blood pressure is 150/100 mm Hg, pulse is 98 bpm.

Formulate and justify the diagnosis and management plan.

What set of treatment measures should be carried out upon admission?

Task No. 2.

A pregnant woman was brought by ambulance to a maternity hospital, complaining of headache and epigastric pain.

Objectively: Pulse 100 beats per minute, swelling of the face, abdomen, legs. The size of the uterus corresponds to full-term pregnancy, the uterus is in constant tone, painful, the fetal heartbeat is muffled, up to 90–100 beats/min.

Formulate and justify the diagnosis and management plan.

Task No. 3.

A 20-year-old woman in the second stage of term labor has an attack of eclampsia. The fetal head is located in the midpelvis – the least pelvic dimensions. Fetal heart sounds are muffled, up to 100 beats/min.

Formulate and justify the diagnosis and management plan.

Task No. 4.

A 32-year-old woman is 30–31 weeks pregnant. Within 3 weeks there was an increase in blood pressure to 170/100 mm Hg. During admission to the maternity hospital complains of headache and difficulty in nasal breathing, decreased diuresis.

Ultrasound revealed signs of FGR (fetal grouth restriction) and oligohydramnios; Doppler ultrasound revealed increased resistance to blood flow in both uterine arteries and a “critical” state of fetal-placental blood flow.

During vaginal examination: The cervix is dense, located posteriorly, up to 2.5 cm long, the external os is closed. The pelvis is capacious. Vaginal discharge is mucous.

Formulate and justify the diagnosis and management plan.

Topic 16

(6 hours)

CESAREAN DELIVERY. MANAGEMENT OF PREGNANCY WITH AN UTERINE SCAR

Motivation: Considering the high frequency of surgical delivery in modern obstetrics (more than 30% in Russia), the knowledge of indications and contraindications for cesarean section, conditions for its implementation, methods and techniques of surgery, preoperative preparation and postoperative management of patients, possible complications in the early and late postoperative periods, is necessary for a general practitioner.

Purpose of the lesson: To study the operation of cesarean section, history, stages of formation and significance of this operation in modern obstetrics, indications and contraindications for this operation, conditions for its implementation, methods and techniques of operation, preoperative preparation and postoperative management of patients, possible complications in the early and late postoperative periods.

Lesson objectives.

1. To study the history, stages of formation and significance of the cesarean section in modern obstetrics.
2. To study the main reasons for the increase in cesarean section rates.
3. To study the indications and contraindications for cesarean section and the conditions for its implementation.
4. To learn the methods and techniques of cesarean section.
5. To study preoperative preparation and postoperative management of patients.
6. To study possible complications in the early and late postoperative periods, measures to prevent them.
7. To study the features of pregnancy and childbirth management in patients with a uterine scar.

Topic issues covered.

1. History, stages of formation and significance of cesarean section in modern obstetrics. The main reasons for the increase in the frequency of cesarean sections.
2. Indications for cesarean section (maternal, fetal, absolute, relative).

3. Contraindications to cesarean section, conditions for its implementation.

4. Methods of anesthesia during cesarean section, the advantages of regional anesthesia.

5. Methods and techniques of cesarean section. Cesarean section in the lower uterine segment. Cesarean section according to Stark. Possible indications for corporal cesarean section.

6. Preoperative preparation and postoperative management of patients. Possible complications in the early and late postoperative periods, measures to prevent them. Antibiotic prophylaxis of septic complications.

7. Features of pregnancy and childbirth management in patients with a uterine scar. Risk of uterine rupture in pregnant women with a uterine scar after cesarean section. Incomplete and incompetent scar on the uterus. Vaginal birth in pregnant women with a uterine scar, informed consent.

Questions for the lecture.

1. History, stages of formation and significance of cesarean section in modern obstetrics. The main reasons for the increase in the frequency of cesarean sections.

2. Indications for cesarean section (maternal, fetal, absolute, relative). Contraindications to cesarean section, conditions for its implementation.

3. Methods of anesthesia during cesarean section, the advantages of regional anesthesia.

4. Methods and techniques of cesarean section. Advantages of cesarean section in the lower uterine segment. Cesarean section according to Stark. Possible indications for corporal cesarean section.

5. Preoperative preparation and postoperative management of patients. Possible complications in the early and late postoperative periods, measures to prevent them. Antibiotic prophylaxis of septic complications.

6. Features of pregnancy and childbirth management in patients with a uterine scar. Risk of uterine rupture in pregnant women with a uterine scar after cesarean section. Childbirth through the birth canal in pregnant women with a scar on the uterus.

7. Informed consent for cesarean section; for the management of vaginal delivery in patients with a uterine scar.

Standard for mastering the topic.

After completing the lesson, the student should know:

1. Absolute and relative indications, conditions and contraindications for emergency and planned cesarean section.

2. Methods of surgery, advantages and disadvantages of various techniques (incision in the uterus, suturing the wound, types of suture material, features of anesthesia).

3. Preoperative preparation and tactics for managing the postoperative period, complications in the early postoperative period and in the long term after surgery.

Should be able to:

1. Collect anamnesis from the pregnant woman, paying special attention to the course of previous births and the current pregnancy, the presence and course of operations on the uterus, conduct a general and special (external and internal) obstetric examination, assess the condition of the fetus, its weight, the correspondence of the size of the fetus and the mother's pelvis, character of cardiac activity, data from additional examination methods and laboratory tests.

2. Diagnose obstetric pathology that requires immediate delivery by cesarean section.

3. Justify the indications for surgery, draw up a preoperative epicrisis.

4. Reproduce the technique of suturing an incision on the uterus using placenta, diaper, foam rubber.

5. Write prescriptions for the management of the postoperative period and prevent septic complications.

Questions for self-study.

1. Stages of development of a cesarean section.
2. Methods and techniques of cesarean section.
3. Technique for cesarean section in the lower uterine segment.
4. Method of corporal cesarean section.
5. Advantages of cesarean section in the lower uterine segment compared to the corporal one.
6. Cesarean section if infection is present or suspected.
7. Features of cesarean section according to Stark.
8. What are the absolute indications for surgery? List them.
9. What are relative indications for surgery? List them.
10. Conditions for performing a cesarean section.
11. Methods of anesthesia during cesarean section, possible complications.
12. Postoperative complications during cesarean section.
13. Management of patients in the postoperative period.
14. Features of antibiotic prophylaxis of septic complications after cesarean section.
15. Features of pregnancy and childbirth management in patients with a uterine scar.
16. Methods of assessing the condition of the uterine scar. What is an incompetent scar on the uterus?

Task No. 1.

A 30-year-old nulliparous woman at full term pregnancy was admitted to the maternity hospital with the onset of labor. Contractions are regular. Pelvic dimensions: 26–26–31–17 cm. The lie of the fetus is longitudinal, the fetal head is engaged to the pelvic inlet, the fetal heartbeat is 136 bpm, rhythmic.

During vaginal examination: The cervix is soft, the cervical dilatation is 4 cm, the membranes are intact. The presenting part is the head. A pulsating loop of the umbilical cord is identified below the head. Diagonal conjugate is 10 cm.

Formulate and justify the diagnosis and delivery tactics.

Task No. 2.

A 28-year-old nulliparous woman was admitted to the maternity hospital at 39 weeks of pregnancy. She complains of headache, abdominal pain and blood discharge from the genital tract. At 33 weeks, blood pressure increased to 140/90 mmHg, traces of protein appeared in the urine. She was treated for 3 weeks in the pregnancy department for preeclampsia.

Objectively: The general condition is severe – headache, flies flashing before the eyes, the skin and visible mucous membranes are pale, pulse is 100 beats per minute, of weak filling and tension, blood pressure is 150/100–160/100 mm Hg. There is no pathology of the internal organs. The uterus is ovoid in shape, tense, sharply painful on palpation, and a bulge is detected in the left corner. It is not possible to determine the lie and presentation of the fetus due to the sharp tension of the uterus. Fetal heart rate is 90 beats per minute, muted. From the genital tract – blood discharge.

During vaginal examination: The cervix is preserved, the external os is closed. The presenting part is the head, engaged to the pelvic inlet. The vaults are free. The pelvic dimensions are normal.

Formulate and justify the diagnosis and delivery tactics.

Task No. 3.

A woman in labor at 39 weeks of pregnancy was admitted to the maternity hospital with good contractions. The pelvic dimensions are normal. The fetal heartbeat is clear, 136 beats per minute. The fetal head is palpated on the right side of the uterus.

During vaginal examination – the cervical dilatation is full, the membranes are intact, the presenting part is not identified, the promontory is not reached.

Formulate and justify the diagnosis and delivery tactics.

Topic 17

(6 hours)

FORCEPS DELIVERY AND VACUUM EXTRACTION OF THE FETUS. FETAL DESTRUCTION SURGERIES

Motivation: Operative vaginal delivery with obstetric forceps and vacuum system has not lost its practical significance, despite the high frequency of cesarean section in modern obstetrics. The rapid termination of second-stage labor by forceps or vacuum extraction delivery is indicated in any condition threatening the mother or fetus that is likely to be relieved by delivery. A general practitioner needs to know the indications and contraindications for these operations, the conditions for performing them, methods and techniques of operations, and possible complications.

Purpose of the lesson.

To study the indications, conditions for forceps application and vacuum extraction of the fetus, fetal destruction surgeries, methods and techniques of operations, possible complications.

Lesson objectives.

1. To study the history, stages of formation and significance of the operation of forceps application in obstetrics, the definition of the operation.
2. To study the indications, conditions, contraindications for the operation of forceps application, preoperative preparation, principles of forceps application, surgical technique, complications during the operation of forceps application.
3. Study the indications, conditions, contraindications for vacuum extraction of the fetus, technique, possible complications.
4. Study the indications, conditions for fetal destruction operations, tools and technique.

Topic issues covered.

1. History, stages of development and significance of the operation of forceps application in obstetrics, definition of the operation. The design of obstetric forceps and models used in modern obstetrics.
2. Indications, conditions, contraindications for the operation of forceps application, preoperative preparation, principles of forceps application, surgical technique, complications during the operation of forceps application. Indications from the parturient woman for the operation of

forceps application. Indications from the fetus for the operation of forceps application. Conditions necessary for the operation of forceps application. Methods of anesthesia used during the operation of forceps application. The main stages of the operation of obstetric forceps application. General principles of obstetric forceps application (three triple rules). Low- (outlet) and midforceps operations. Possible complications when performing operations using obstetric forceps.

3. Indications, conditions, contraindications for vacuum extraction of the fetus, technique, possible complications of vacuum extraction of the fetus. Vacuum delivery system "Kiwi".

4. Indications, conditions for fetal destruction operations, tools and technique. Types (classification) of fetal destruction operations. Craniotomy. Indications, conditions, set of instruments, anesthesia, preparation, technique, complications. Cranioclasia. Indications, conditions, set of instruments, anesthesia, preparation, technique, complications. Decapitation. Indications, conditions, set of instruments, anesthesia, preparation, technique, complications. Cleidotomy. Indications, conditions, set of instruments, anesthesia, preparation, technique, complications. Complications for the mother during fetal destruction operations.

Questions for the lecture: No.

Standard for mastering the topic.

After completing the lesson, the student should know:

1. The design of obstetric forceps and models used in modern obstetrics.

2. Indications, conditions, contraindications for the operation of forceps application, preoperative preparation, principles of forceps application, surgical technique, complications during the operation of forceps application.

3. Indications, conditions, contraindications for vacuum extraction of the fetus, technique, possible complications.

4. Indications, conditions for performing fetal destruction operations, tools and technique.

Should be able to:

1. Determine the indications for the application of obstetric forceps, correctly apply low (outlet) forceps and midforceps to the phantom.

2. Determine the indications for the use of vacuum delivery system "Kiwi", perform the operation on a phantom.

3. Determine the indications for performing a fetal destruction operation, show on a phantom the stage of each fetal destruction operation with the appropriate set of tools.

Questions for self-study.

1. The design of obstetric forceps and models used in modern obstetrics.
2. Indications from the parturient woman for the operation of applying obstetric forceps.
3. Indications from the fetus for the use of obstetric forceps.
4. Conditions necessary for the operation of forceps application.
5. Methods of anesthesia used during the operation of forceps application.
6. The main stages of the operation of forceps application.
7. General principles of forceps application (three triple rules).
8. Outlet (low) forceps application.
9. Midforceps fapplication.
10. Possible complications of forceps application and vacuum extraction of the fetus.
11. Types (classification) of fetal destruction operations.
12. Craniotomy. Indications, conditions, set of instruments, anesthesia, preparation, technique, complications.
13. Cranioclasia. Indications, conditions, set of instruments, anesthesia, preparation, technique, complications.
14. Decapitation. Indications, conditions, set of instruments, anesthesia, preparation, technique, complications.
15. Cleidotomy. Indications, conditions, set of instruments, anesthesia, preparation, technique, complications.
16. Complications from the mother during fetal destruction operations.

Task No. 1.

A 24-year-old nulliparous woman was admitted to the maternity hospital 16 hours after the onset of labor. The membranes were ruptured 2 hours before arrival. Full term pregnancy. Pelvic dimensions: 25–28–31–20 cm. The lie of the fetus is longitudinal, the fetal head is located in the midpelvis. The fetal heartbeat is heard on the left below the navel, decreases during contractions to 80 beats/min and does not level out between contractions.

Vaginal examination: The cervix is fully dilatated, the membranes are ruptured. The fetal head is located in the midpelvis. Sagittal suture is palpated in the right oblique diameter, small (posterior) fontanel is on the left anteriorly below the large one.

Formulate and justify the diagnosis and delivery tactics.

Task No. 2.

A 38-year-old woman in labor was transported by ambulance. She has 4th pregnancy, 3rd birth. A previous pregnancy was accompanied by edema and an increase in blood pressure to 150/100 mm Hg. Had a history of hypertension and was self-treated. Visited the antenatal clinic twice during pregnancy. Weight gain during pregnancy – 20 kg. Labor activity – 4 hours. The membranes ruptured in the ambulance, the amniotic fluid is light. 30 minutes before admission to the hospital, a headache appeared, deterioration of health, and visual disturbances were noted. Swelling of the legs and anterior abdominal wall. Blood pressure 180/100 mm Hg. art., pulse – 92 bpm. Proteinuria > 3 g/l.

Vaginal examination: The cervix is fully dilatated, the membranes are ruptured. The fetal head is located in the midpelvis. Sagittal suture is palpated in the left oblique diameter, closer to the antetiorposterior diameter, small (posterior) fontanel is on the right under the pubis. The ischial spines cannot be palpated. The sacrum and the entire posterior surface of the symphysis are occupied by the head.

Formulate and justify the diagnosis and delivery tactics.

Task No. 3.

A 19-year-old nullipara at 32 weeks of pregnancy was admitted to the maternity hospital. Contractions every 5–7 minutes for 40–45 seconds for 15 hours. The membranes ruptured 10 hours ago. On examination: abdominal circumference is 95 cm, height of the uterine fundus is 30 cm, pelvic dimensions: 25–27–30–19 cm. The fetal head is determined on the right, the heartbeat is not heard. Light amniotic fluid leaks from the genital tract in moderate quantities.

Vaginal examination: vagina of nulliparous woman, narrow. The fetal arm is identified in the vagina. The cervix is fully dilatated. There are no membranes. The promontorium is not reached, there are no exostoses in the pelvis, light amniotic fluid leaks in moderate quantities.

Formulate and justify the diagnosis and delivery tactics.

Task No. 4.

A 27-year-old woman in labor was brought to the obstetric clinic with frequent contractions that began 4 hours ago. Third pregnancy, full term. The first was interrupted by an induced abortion, the second ended in a normal birth. This pregnancy proceeded normally.

Objectively: Pelvic dimensions: 26–28–31–21. The circumference of the abdomen is 98 cm, the height of the fundus of the uterus above the womb is 31 cm. The lie of the fetus is longitudinal, the back is located on the left, the small parts are determined on the right. A large, dense part of the fetus is engaged to the pelvic inlet. The fetal heartbeat cannot be heard. Contractions are intense, 60 seconds every 2–3 minutes. Meconium-stained amniotic fluid leaks.

During vaginal examination: The vagina is capacious, the cervix is fully dilatated. There are no membranes. The fetal head is engaged to the pelvic inlet, a sagittal suture is palpated in the right oblique diameter, a small (posterior) fontanel on the left at the womb, a large (anterior) fontanel on the right at the sacrum. In front of the head on the right, a loop of pulsating umbilical cord about 20 cm long is determined. The promontory of the sacrum is not reached.

Formulate and justify the diagnosis and delivery tactics.

Topic 18

(4 hours)

POSTPARTUM DISEASES

Motivation: A general practitioner needs to study the clinical course and management of the postpartum period, etiology, pathogenesis, clinical picture and medical tactics for postpartum infectious complications in order to carry out the necessary prevention of septic complications and provide rational assistance when they occur.

Purpose of the lesson.

To study the etiology and pathogenesis of postpartum infectious complications, stages of the septic process, classification of postpartum diseases, factors contributing to the development of postpartum infectious diseases during pregnancy, childbirth and the postpartum period, features of the clinical course, diagnostic methods, principles of treatment of postpartum septic diseases and their prevention.

Lesson objectives.

1. To study the etiology and pathogenesis of postpartum infectious complications, stages of the septic process.
2. To study the classification of postpartum diseases, factors contributing to the development of postpartum infectious diseases during pregnancy, childbirth and the postpartum period.
3. To study the features of the clinical course, diagnosis, principles of treatment of postpartum septic diseases and their prevention.

Topic issues covered.

1. Etiology and pathogenesis of postpartum infectious complications.
2. Factors contributing to the development of postpartum infectious diseases during pregnancy, childbirth and the postpartum period.
3. Stages of the septic process, classification of postpartum diseases (postpartum ulcers, endometritis, metritis, parametritis, salpingoophoritis, pelvioperitonitis, postpartum thrombophlebitis (extrapelvic and intrapelvic), postpartum (lactation) mastitis, generalized septic infection (obstetric peritonitis, sepsis, septic shock).
4. Features of the clinical course of postpartum septic diseases.
5. Methods for diagnosing postpartum septic diseases.
6. Principles of treatment of postpartum septic diseases.
7. Prevention of postpartum septic diseases.

Questions for the lecture.

1. Etiology and pathogenesis of postpartum infectious complications, factors contributing to the development of postpartum infectious diseases during pregnancy, childbirth and the postpartum period.
2. Stages of the septic process, classification of postpartum diseases (postpartum ulcers, endometritis, metritis, parametritis, salpingoophoritis, pelvioperitonitis, postpartum thrombophlebitis (extrapelvic and intrapelvic), postpartum (lactation) mastitis, generalized septic infection (obstetric peritonitis, sepsis, septic shock).
3. Features of the clinical course of postpartum septic diseases.
4. Methods for diagnosing postpartum septic diseases.
5. Principles of treatment of postpartum septic diseases.
6. Prevention of postpartum septic diseases.

Standard for mastering the topic.

After completing the lesson, the student should know:

1. Etiology and pathogenesis of postpartum infectious complications, stages of the septic process.
2. Classification of postpartum diseases.
3. Factors contributing to the development of postpartum infectious diseases during pregnancy, childbirth and the postpartum period.
4. Features of the clinical course of postpartum septic diseases.
5. Diagnostic methods, principles of treatment of postpartum septic diseases and their prevention.

Should be able to:

1. Conduct the complete examination of a postpartum woman (anamnesis collection, general and special objective examination, condition of the mammary glands, condition of the uterus, the nature of lochia, bladder and bowel function).
2. Based on objective and additional examination methods (ultrasound, blood test, urine test, smear for vaginal flora), assess the course of the postpartum period, conduct a differential diagnosis of the physiological and complicated course of the postpartum period.
3. Diagnose postpartum septic disease, take smears and cultures from the vagina and cervical canal for flora and sensitivity to antibiotics, write prescriptions for medications used in the treatment of septic postpartum diseases, master measures to prevent postpartum diseases.

Questions for self-study.

1. Etiological factors of postpartum infectious diseases and their features.
2. Physiological anti-infective barriers of the female reproductive tract.
3. Features of humoral and cellular immunity in pregnant and postpartum women.
4. Features of the birth tract in postpartum women that contribute to the occurrence of postpartum infectious diseases.
5. Factors that arise during pregnancy and contribute to the development of postpartum infectious diseases.
6. Factors that arise during childbirth and contribute to the development of postpartum infectious diseases.
7. Postpartum factors that contribute to the development of postpartum infectious diseases.
8. Classification of postpartum infectious diseases.
9. Clinical picture of postpartum endomyometritis.
10. Diagnosis of postpartum pelvioperitonitis.
11. Basic principles of treatment of postpartum infectious diseases.
12. Prevention of postpartum infectious diseases.

Task No. 1.

First birth, at term. Prenatal rupture of membranes. Duration of labor is 10 hours 30 minutes. Anhydrous interval is 12 hours 30 minutes. From the third trimester, a decrease in hemoglobin to 95 g/l was noted. On the 4th day after birth, the temperature rose to 38–39˚C, tachycardia and chills appeared.

Objectively: Pulse 96 bpm, rhythmic. Blood pressure 105/70 mm Hg. Art. The skin is pale pink in color. The mammary glands are soft, the nipples are clean, the outflow is good.

During vaginal examination: The body of the uterus is 2 cm below the navel, soft in consistency, painful on palpation. Lochia – cloudy with an odor.

Formulate and justify the diagnosis and management plan.

Task No. 2.

During a round on the 4th day after the first term delivery of a large fetus, the postpartum woman complains of pain and burning in the vulva area. Temperature 36.9˚C, blood pressure 115/70 mm Hg. Art.

Upon examination in the lower third of the right lateral wall of the vagina, a wound surface up to 2 cm was found, covered with a dirty gray coating that is difficult to remove from the underlying tissue. The wound bleeds easily, the tissue around it is swollen and hyperemic.

Formulate and justify the diagnosis and management plan.

Appendix
Standard answers to situational problems

Topic No. 3.

Task No. 1.

a) Longitudinal lie, cephalic presentation, I (left) anterior position. Heart sounds are best heard on the left, below the navel, lateral to the linea alba.

b) Longitudinal lie, cephalic presentation, I (left) posterior position. Heart sounds are best heard on the left, below the navel, lateral to the linea alba.

c) Longitudinal lie, cephalic presentation, II (right) anterior position. Heart sounds are best heard on the right, below the navel, closer to the linea alba.

d) Longitudinal lie, cephalic presentation, II (right) posterior position. Heart sounds are best heard on the right, below the navel, lateral to the linea alba.

e) Transverse lie, II (right) posterior position. The presentating part is not determined. Fetal heart sounds are heard at the level of the navel on the right.

f) Longitudinal lie of the fetus, breech presentation, I (left) posterior position. Fetal heart sounds are best heard on the left, above the navel, lateral to the linea alba.

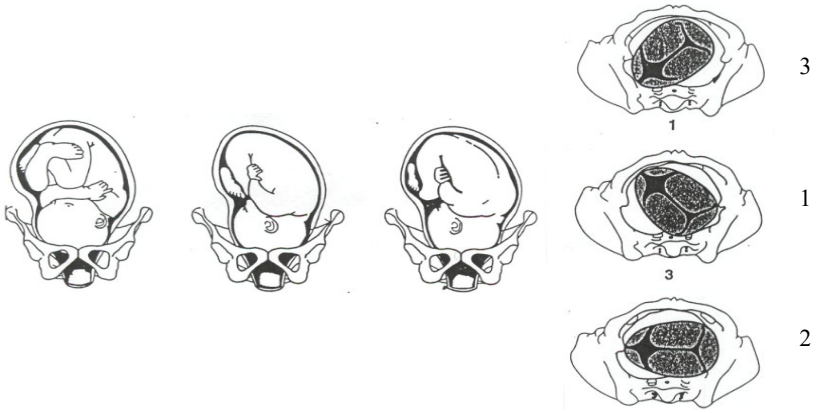
g) Longitudinal lie of the fetus, breech presentation, II (right) posterior position. Fetal heart sounds are best heard on the right, above the navel, lateral to the linea alba.

Topic No. 4.

Task No. 1. Longitudinal lie of the fetus, occiput presentation, I anterior position.

Task No. 2. Longitudinal lie of the fetus, occiput presentation, I posterior position.

Task No. 3.



Topic No. 5.

Task No. 1.

Diagnosis: 39–40 weeks of pregnancy Occiput presetation,. I anterior position. I stage of labor.

Rationale: 39–40 weeks of pregnancy – palpation of parts of the fetus, heartbeat auscultation, abdominal circumference and uterine fundus height correspond to full-term pregnancy. The nature of the presentation of the head was established on the basis of vaginal examination data. I stage of labor – cervical dilatation is 5 cm.

Task No. 2.

Diagnosis: 39–40 weeks of pregnancy. Occiput presentation,.anterior position. II stage of labor.

The fetal head is located in the midpelvis (the head occupies the boundaries of the midpelvis; the internal rotation of the head has completed).

Delivery should be vaginal, with auscultatory monitoring of fetal well-being or continuous CTG monitoring.

Topic No. 6.

Task No. 1.

After transferring a postpartum woman to the postpartum department, the midwife should monitor the following indicators: the condition of the postpartum woman, the color of the skin and mucous membranes, body temperature, blood pressure, pulse, condition of the mammary glands, condition of the abdomen, tone, tenderness of the uterus and the height of the uterine fundus, the volume of bloody discharge from vagina, urination, condition of sutures in case of ruptures of the birth canal.

Task No. 2.

Complications in the postpartum period with anemia in pregnant women:

– progression of anemia (iron supplements);

– postpartum infectious diseases (preventive antibiotic therapy);

– hypotonic and coagulopathic bleeding in the postpartum period (monitoring the tone of the uterus, the volume of bloody discharge from the vagina, uterotonic therapy according to indications, monitoring a clinical blood test, coagulation test).

Topic No. 7.

Task No. 1.

Diagnosis: 39–40 weeks of pregnancy. Sinciput presentation, II position. End of the first stage of labor. Large fetus.

Delivery tactics: Amniotomy; vaginal delivery with a functional assessment of the pelvis, with the development of signs of fetopelvic disproportion – cesarean delivery.

Task No. 2.

Diagnosis: 39 weeks of pregnancy. Brow presentation. II stage of labor.

Delivery tactics: cesarean delivery on an emergency basis.

Task No. 3.

Diagnosis: 39–40 weeks of pregnancy. Face presentation, II posterior position. II stage of labor.

Delivery tactics: amniotomy; it is possible to conduct vaginal delivery; monitor the condition of the fetus and the fetal head descent.

Topic No. 8.

Task No. 1.

Diagnosis: 39–40 weeks of pregnancy. Breech presentation. Premature rupture of membranes. Young primigravida (1 birth at 17 years).

Delivery tactics: given the expected large size of the fetus in a breech presentation (more than 3600), delivery by cesarean section is recommended.

Task No. 2.

Diagnosis: 38 weeks of pregnancy. Breech presentation. I stage of labor. Complicated obstetric and gynecological history (spontaneous miscarriage).

Delivery tactics: vaginal delivery with continuous CTG monitoring, partogram control and assistance in the second stage of labor depending on the type of breech presentation. Prevention of third-stage and early postpartum bleeding.

Topic No. 9.

Task No. 1.

Diagnosis: 10 weeks of pregnancy. Spontaneous miscarriage: complete? incomplete?

Management plan:

1) urgent further examination in the emergency department: pelvic ultrasound; clinical, biochemical blood test, coagulation test, blood group and Rh factor. Smears for flora and bacterial culture;

2) in the absence of remnants of the fertilized egg in the uterine cavity – uterotonic, anti-inflammatory (antibacterial) therapy. In the case of Rh-negative blood, administration of anti-Rhesus immunoglobulin within 72 hours, preferably in the first 72 hours;

3) if there are remnants of the fertilized egg in the uterine cavity, instrumental removal of the remnants of the fertilized egg followed by therapy, as in 2).

Task No. 2.

Diagnosis: 16 weeks of pregnancy, multiple? The onset of spontaneous late miscarriage. Trophoblastic disease?

Management plan:

1) emergency hospitalization;

2) urgent additional examination in the emergency department: pelvic ultrasound, clinical, biochemical blood test, coagulation test, blood group and Rh factor. Smears for flora and bacterial culture;

3) upon confirmation of the diagnosis of incipient abortion in a multiple pregnancy, treatment aimed at prolonging pregnancy;

4) when trophoblastic disease is detected according to pelvic ultrasound data – determination of the level of β-hCG in the blood, chest x-ray, ultrasound of the abdominal cavity. Preparing to empty the uterus.

Task No. 3.

Diagnosis: 12 weeks of pregnancy. Spontaneous miscarriage has begun.

Management plan: examination and treatment aimed at prolonging pregnancy (progesterone medications).

Task No. 4.

Diagnosis: 8 weeks of pregnancy. Artificial abortion. Perforation of the uterus?

Management plan: Pelvic ultrasound. Laparoscopy. If the diagnosis is confirmed, the uterus is emptied under ultrasound and laparoscopy control. Suturing a perforation hole on the uterus. Revision of the abdominal cavity. Sanitation and drainage of the abdominal cavity. In the postoperative period – uterotonic, anti-inflammatory therapy.

Topic No. 10.

Task No. 1.

Diagnosis: 37–38 weeks of pregnancy. Transverse lie of the fetus, II position. I stage of labor (?). Complicated obstetric and gynecological history.

Management plan: Cesarean section.

Task No. 2.

Diagnosis: 37–38 weeks of pregnancy. Oblique lie of the fetus. I position. I stage of labor.

Management plan: resolving the issue of the possibility of external fetal version.

Topic No. 11.

Task No. 1.

Diagnosis: 39–40 weeks of pregnancy. Face presentation, I anterior position. II stage of labor. Clinical contracted pelvis (fetopelvic disproportion). Threatening uterine rupture. Complicated obstetric history (7 medical abortions).

Delivery by emergency cesarean section.

Complications: uterine rupture; intrapartum fetal death.

Face presentation should be differentiated from breech presentation of the fetus.

Task No. 2.

Diagnosis: 39–40 weeks of pregnancy. Occiput presentation, I position. I stage of labor. Posterior asynclitism. Clinical contracted pelvis (fetopelvic disproportion).

Delivery by emergency cesarean section.

The absence of head descent during good labor indicates the development of a fetopelvic disproportion.

Topic No. 12.

Task No. 1.

Diagnosis: 39–40 weeks of pregnancy. Neglected transverse lie of the fetus. II stage of labor. Intrapartum fetal death.

Delivery is indicated through a fetal destruction operation – decapitation, under intravenous anesthesia. Control manual uterine examination.

Task No. 2.

Diagnosis: 41 weeks of pregnancy. Occiput presentation, I position. II stage of labor. Posterior asynclitism. Clinical contracted pelvis. Fetal distress. Large fetus.

Delivery tactics: Delivery by emergency cesarean section.

Task No. 3.

Diagnosis: 41–42 weeks of pregnancy. Cephalic presentation. Generally contracted pelvis of I–II degree (c. verae 9 cm). Large fetus. Young primigravida (1 upcoming birth at 16 years old).

Delivery tactics: Delivery by cesarean section.

Task No. 4.

Diagnosis: 39–40 weeks of pregnancy. Cephalic presentation. Premature rupture of membranes. Incompetent scar on the uterus after cesarean section. Complicated obstetric history.

Delivery tactics: delivery by emergency cesarean section.

Topic No. 13.

Task No. 1.

Diagnosis: 39–40 weeks of pregnancy. Cephalic presentation. II stage of labor. Premature placental abruption. Acute fetal hypoxia. Preeclampsia (?). Gestational arterial hypertension (?).

Tactics: delivery by emergency cesarean section, Cell-Saver blood reinfusion, infusion therapy. Determination of coagulation status according to Lee-White test or TEG. Correction of coagulopathy.

In case of premature placental abruption in the second stage of labor, the choice of delivery method is determined by the fetal head station: with the fetal head in the midpelvis and in the pelvic outlet – vaginal delivery; in the plane of greatest pelvic dimension and above – cesarean section.

Task No. 2.

Diagnosis: 39–40 weeks of pregnancy. Placenta previa (?). Premature placental abruption (?). Vaginal bleeding.

Tactics: delivery by emergency cesarean section, Cell-Saver blood reinfusion, infusion therapy. Determination of coagulation status according to Lee-White test or TEG. Correction of coagulopathy.

Task No. 3.

Diagnosis: 39–40 weeks of pregnancy. Placenta previa, bleeding. I stage of labor. Hemorrhagic shock?

Tactics: delivery by emergency cesarean section, Cell-Saver blood reinfusion, infusion therapy. Determination of coagulation status according to Lee-White test or TEG. Correction of coagulopathy.

Topic No. 14.

Task No. 1.

Diagnosis: Prolonged third stage of labor (2nd term birth). Complicated obstetric and gynecological history (3 medical abortions, endometritis).

Tactics: manual placental removal.

The third stage of labor was conducted incorrectly; the operation of manual placental removal is indicated 30 minutes after the birth of the fetus in the absence of signs of placental separation and bleeding.

Task No. 2.

Diagnosis: Early postpartum period after 2nd term birth with a large fetus. Partial separation of the placenta, manual placental removal. Hypotonic bleeding. Complicated obstetric history.

Tactics: External massage of the uterus, intravenous administration of oxytocin/carbetocin, introduction of an intrauterine hemostatic balloon or application of clamps to the parametrium according to Baksheev. Correction of the coagulation disorders. If there is no effect – abdominal section, ligation of blood vessels, application of hemostatic compression sutures to the uterus. Cell Saver blood reinfusion. Infusion therapy, transfusion therapy according to indications. If bleeding continues, remove the uterus.

Topic No. 15.

Task No. 1.

Diagnosis: 37–38 weeks of pregnancy. Eclampsia.

Upon admission: anticonvulsant therapy with magnesium sulfate.

Delivery tactics: preparation for delivery within 1–2 hours (magnesium, antihypertensive therapy, treatment of multiple organ failure). Delivery by abdominal section, cesarean section.

Task No. 2.

Diagnosis: 39–40 weeks of pregnancy. Preeclampsia. Premature placental abruption. Acute fetal hypoxia.

Delivery tactics: delivery by emergency cesarean section. Intensive treatment of preeclampsia: anticonvulsant therapy with magnesium sulfate, antihypertensive therapy.

Task No. 3.

Diagnosis: 39–40 weeks of pregnancy. Cephalic presentation. II stage of labor. Eclampsia.

Delivery tactics: emergency delivery with forceps application. Anticonvulsant therapy with magnesium sulfate, antihypertensive therapy, treatment of multiple organ failure.

Task No. 4.

Diagnosis: 30–31 weeks of pregnancy. Severe preeclampsia. Placental insufficiency (FGR, oligohydramnios, critical state of fetal-placental blood flow).

Management tactics: delivery by cesarean section; complex therapy of preeclampsia.

Topic No. 16.

Task No. 1.

Diagnosis: 39–40 weeks of pregnancy. Cord presentation. I stage of labor. Flat-rachitic pelvis of 2 degree.

Tactics: delivery by emergency cesarean section.

Task No. 2.

Diagnosis: 39 weeks of pregnancy. Cephalic presentation. Preeclampsia. Premature placental abruption, bleeding. Acute fetal hypoxia.

Management tactics: delivery by emergency cesarean section, Cell-Saver blood reinfusion, infusion therapy. Determination of coagulation status according to Lee-White test or TEG. Correction of coagulopathy. Treatment of preeclampsia, correction of multiple organ failure.

Task No. 3.

Diagnosis: 39 weeks of pregnancy. Transverse lie of the fetus, II position. II stage of labor.

Tactics: Emergency cesarean section.

Topic No. 17.

Task No. 1.

Diagnosis: 39–40 weeks of pregnancy. Occiput presentation, I anterior position. II stage of labor. Acute fetal hypoxia.

Tactics: emergency delivery by vacuum extraction of the fetus or forceps application.

Task No. 2.

Diagnosis: 39–40 weeks of pregnancy. Occiput presentation, II anterior position. II stage of labor. Severe preeclampsia.

Tactics: Emergency delivery by forceps application, treatment of preeclampsia.

Task No. 3.

Diagnosis: 32 weeks of pregnancy. Neglected transverse lie of the fetus, II position. II stage of labor. Intrapartum fetal death. Early rupture of membranes?

Tactics: A fetal destruction operation and a control manual uterine examination are indicated.

Task No. 4.

Diagnosis: 39–40 weeks of pregnancy. Occiput presentation, I anterior position. II stage of labor. Cord prolapse. Intrapartum fetal death.

Tactics: Vaginal delivery, fetal destruction operation is possible.

Topic No. 18.

Task No. 1.

Diagnosis: 4 days after the first term birth. Endometritis. Anemia.

Tactics: Ultrasound, clinical blood test, urine test, bacterial culture from the cervical canal; uterotonic therapy, empirical antibacterial therapy, infusion, detoxification therapy. Iron supplements.

Task No. 2.

Diagnosis: 4 days after the first term delivery of a large fetus. Postpartum ulcer of the right lateral vaginal wall.

Tactics: Local treatment.

Clinical birth history plan

I. **Passport part.**

1. Full Name.
2. Age.
3. Profession.
4. Date and time of arrival.
5. Date and hour of supervision.
6. Complaints upon admission and at the time of supervision.

II. **Anamnesis.**

1. Life history (including working and living conditions).
2. Heredity (including the presence of multiple pregnancies in parents and immediate relatives).
3. Previous common diseases.
4. Allergy history.
5. Menstrual function: at what age did menstruation begin, when did it begin, how many days, after what time, the amount of blood lost (heavy, moderate, scanty), pain.
6. Sexual life: at what age did it begin, what kind of marriage, marriage registration, husband's age and information about his health, blood type, husband's Rh factor. Contraception.
7. Previous gynecological diseases, including treatment and its results.
8. Reproductive function: list all pregnancies in chronological order and how they ended:

- regarding childbirth, indicate: normal or pathological, what complications there were during pregnancy, childbirth, the postpartum period, surgical interventions, the presence of birth injuries, weight and height of newborns, development of children;
- regarding termination of pregnancy: timing of termination, cause, spontaneous or artificial abortion, complications in the post-abortion period.

9. The course of this pregnancy:

- date of last menstruation (start and end);
- date of first fetal movement;
- the course of this pregnancy by trimester: taking into account information from the antenatal clinic (when and at what period, data from blood and urine tests over time, blood pressure dynamics, blood type, Rh factor, presence of Rh antibodies, HIV, hepatitis, syphilis screening,

examination for infections, specialist consultations, availability of outpatient treatment, for what, inpatient treatment – duration, where, reason, psychoprophylactic preparation for childbirth, date of provision of prenatal leave);

• the course of pregnancy from the moment of admission to the start of supervision.

10. Course of labor:

• the period of dilation, the onset of contractions, the dynamics of the development of labor, the descent of the presenting part of the fetus, the well-being of the fetus during labor, the time of rupture of membranes, the biomechanism of labor. second stage of labor: onset, characteristics of pushing, descent of the presenting part, condition of the fetus;

• the third stage of labor – signs of placenta separation, mechanism of placenta separation, duration, examination of the placenta, blood loss during childbirth;

• examination of the birth canal, presence of birth trauma, suturing;

• data on the newborn, apgar score, height, weight, primary toilet of the newborn;

• the course of the early postpartum period.

Note: if childbirth has not occurred at the time of supervision, then its course is not recorded in this section, but is described in Section VIII (diaries).

III. **Objective research (at the start of supervision).**

1. General examination.

General state. T body, skin, pigmentation. Dilatation of veins. Presence of edema. Belly shape. Presence of stretch marks in a pregnant woman. Mammary gland. Nipples. Thyroid.

Respiratory system.

Circulatory organs.

Urinary organs.

Nervous system and sensory organs.

Digestive organs.

2. Special obstetric examination:

• pelvic dimensions – pelvimetry;

• sacral rhombus (shape, dimensions);

• Solovyov index;

• the height of the uterine fundus above the womb;

• abdominal circumference;

• fetal length, direct size of the head using a pelvis gauge. estimated fetal weight;

• Leopold's maneuvers: the height of the fundus of the uterus, which is located in the fundus of the uterus, the lie, position and variety of position of the fetus, presentation of the fetus and the relationship of the presenting part of the fetus to the pelvic inlet;

• fetal heartbeat;

• labor activity: presence of contractions, their duration, strength, frequency;

• data from examination of the external genital tract;

• vaginal examination: vagina, cervix (preserved or effaced), fetal membranes, presenting part, relation to the pelvic inlet, biomechanism of labor, diagonal conjugate, bony pelvis, promontorium accessible or not. Discharge.

3. Laboratory data.

IV. **Diagnosis and its rationale.**

The diagnosis reflects the presence of pregnancy and its duration. Fetal lie, presentation, position, variety of position. The stage of labor. Complications of labor. Complications of pregnancy. Diseases not related to pregnancy. (The diagnosis is justified for each formulation).

V. **Etiology and pathogenesis.** Stated in the presence of pathology of pregnancy or childbirth in relation to the supervised patient.

VI. **Management plan.** After stating the diagnosis and its justification, a pregnancy management plan is drawn up; after 36 weeks of pregnancy, a delivery tactics is drawn up, reflecting the main points in accordance with the diagnosis that require timely correction, observation, and birth prognosis.

VII. **Analysis of the course of labor.** The section is presented in the following sequence: if the birth occurred before the moment of supervision, then it is described in the anamnesis; if the birth occurred after the start of supervision, then the analysis in the “Diary” after the description of the birth.

VIII. **Supervision diary.**

IX. **Epicrisis** (as a short summary).

Recommended reading

1. Акушерство: учебник / Г. М. Савельева, Р. И. Шалина, Л. Г. Сичинава [и др.]. – 2-е изд., перераб. и доп. – Москва: ГЭОТАР-Медиа, 2020. – 576 с.

2. Акушерство: национальное руководство / под ред. Г. М. Савельевой, Г. Т. Сухих, В. Н. Серова [и др.]. – 2-е изд., перераб. и доп. – Москва: ГЭОТАР-Медиа, 2018. – 1088 с.

3. Айламазян, Э. К. Акушерство: учебник / Э. К. Айламазян. – 10-е изд., перераб. и доп. – Москва: ГЭОТАР-Медиа, 2019. – 768 с.

4. Акушерство. Национальное руководство. Краткое издание / Э. К. Айламазян, В. Н. Серов, В. Е. Радзинский [и др.]. – Москва: ГЭОТАР-Медиа, 2021. – 608 с.

5. Доброхотова, Ю. Э. Антенатальная помощь беременным с экстрагенитальными заболеваниями / Ю. Э. Доброхотова, Е. И. Боровкова. – Москва: ГЭОТАР-Медиа, 2020. – 384 с.

6. Женская консультация. Руководство для врачей / под ред. В. Е. Радзинского, Р. Е. Орехова. – Москва: ГЭОТАР-Медиа, 2024. – 784 с.

7. Жорданиа, И. Ф. Учебник акушерства / И. Ф. Жорданиа. – Москва: Медгиз, 1964. – 621 с.

8. Клинические рекомендации «Нормальная беременность» // Российское общество акушеров-гинекологов. – 2020.

9. Клинические рекомендации «Роды одноплодные, самопроизвольное родоразрешение в затылочном предлежании (нормальные роды)» // Российское общество акушеров-гинекологов. – 2022.

10. Клинические рекомендации «Тазовое предлежание плода» // Российское общество акушеров-гинекологов. – 2020.

11. Клинические рекомендации (протокол) «Оказание медицинской помощи при анатомически и клинически узком тазе» // Министерство здравоохранения РФ. – 2017.

12. Клинические рекомендации «Медицинская помощь матери при установленном или предполагаемом несоответствии размеров таза и плода. Лицевое, лобное или подбородочное предлежание плода, требующее предоставления медицинской помощи матери» // Российское общество акушеров-гинекологов. – 2023.

13. Клинические рекомендации «Преэклампсия. Эклампсия. Отеки, протеинурия и гипертензивные расстройства во время беременности, в родах и послеродовом периоде» // одобрено Научно-практическим Советом Минздрава РФ. – 2021.

14. Клинические рекомендации (протокол) «Тромботическая микроангиопатия в акушерстве» // Министерство здравоохранения РФ. – 2017.

15. Клинические рекомендации «Оперативные влагалищные роды (роды одноплодные, родоразрешение с наложением щипцов или с применением вакуум-экстрактора)» // Министерство здравоохранения РФ. – 2023.

16. Клинические рекомендации «Послеоперационный рубец на матке, требующий предоставления медицинской помощи матери во время беременности, родов и в послеродовом периоде» // Министерство здравоохранения РФ. – 2021.

17. Клинические рекомендации «Неудачная попытка стимуляции родов (подготовка шейки матки к родам и родовозбуждение)» // Российское общество акушеров-гинекологов. – 2022.

18. Клинические рекомендации (протокол) «Септические осложнения в акушерстве» // Министерство здравоохранения РФ. – 2017.

19. Клинические рекомендации по диагностике и лечению заболеваний, сопровождающихся патологическими выделениями из половых путей женщин // Российское общество акушеров-гинекологов. – 2-е изд., испр. и доп. – 2019.

20. Макаров, О. В. Клинические лекции по акушерству / О. В. Макаров, Ю. Э. Доброхотова, И. В. Бахарева. – Москва: ГЭОТАР-Медиа, 2017. – 544 с.

21. Малиновский, М. С. Оперативное акушерство / М. С. Малиновский. – Москва: Медицина, 1974. – 416 с.

22. Венозные тромбоэмболические осложнения в акушерстве и гинекологии / Л. А. Озолиня, С. Б. Керчелаева, И. А. Лапина [и др.]. – 2-е изд., испр. и доп. – Москва: ГЭОТАР-Медиа, 2020. – 288 с.

23. Приказ Минздрава России «Об утверждении Порядка оказания медицинской помощи по профилю «акушерство и гинекология» от 20.10.2020 № 1130н // Зарегистрировано в Минюсте России 12.11.2020 № 60869.

24. Акушерство. Руководство к практическим занятиям: учебное пособие / под ред. В. Е. Радзинского. – 5-е изд., перераб. и доп. – Москва: ГЭОТАР-Медиа, 2015. – 728 с.

25. Схемы лечения. Акушерство и гинекология / под ред. В. Н. Серова; ред.-сост. И. И. Баранов. – 3-е изд., испр. и доп. – Москва: Литтерра, 2021. – 368 с.

26. Шмаков, Р. Г. Хирургическая тактика операции кесарева сечения: учебное пособие / Р. Г. Шмаков, О. Р. Баев, О. Г. Пекарев [и др.]. – Москва: Бином, 2019. – 82 с.

27. Шмаков, Р. Г. Анемия беременных / Р. Г. Шмаков, Г. Н. Каримова. – Москва: ГЭОТАР-Медиа, 2020. – 160 с.

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