

“Затверджено“
на методичній нараді кафедри акушерства,
гінекології та планування сім’ї
медичного інституту СумДУ
протокол № _____
від “ _____ “ _____ 2021р.

Methodical development

independent work of a student in the discipline "Obstetrics"

Topic: Placental dysfunction. Fetal distress. Delayed fetal development. Isoantigenic incompatibility of maternal and fetal blood.

Number of hours - 3.

Objective: to study the causes, pathogenesis, methods of diagnosis and treatment of placental dysfunction, the concept of fetal developmental delay, causes, forms, methods of diagnosis of placental dysfunction and fetal developmental delay, causes and pathogenesis of fetal distress and neonatal asphyxia, methods of diagnosis and complex method of treatment of fetal distress, stages of resuscitation of newborns, to study the concepts of "isoimmunization", "hemolytic disease of the fetus and newborn", causes, pathogenesis, methods of diagnosis, forms and severity of immunological conflict, methods of treatment of hemolytic disease of fetus and newborn, pregnancy algorithm childbirth in isoimmune conflict, specific prevention of rhesus sensitization.

The student must: assess the degree of placental dysfunction, take measures to treat placental dysfunction, determine the degree of fetal developmental delay, assess the degree of fetal distress (auscultation, CTG, CLS), take measures to treat fetal distress, conduct toilet newborn respiration, conduct , inject drugs into the umbilical vein, evaluate the results of laboratory tests, history of pregnancy to determine risk factors for immune conflict, evaluate the results of ultrasound in immune conflict. to assess the functional state of the fetus, to determine the tactics of pregnancy in immune conflict, to determine the term and tactics of delivery in immune conflict, to determine the timing of specific prevention of immune conflict.

Class organization:

I. Testing: 20 tests.

II. Key issues:

1. What does the concept of PD include?
2. Causes of PD.
3. Classification of PD.
4. Diagnosis of PD
5. What is the biophysical profile of the fetus?
6. What is intrauterine growth retardation?
7. Classification of intrauterine growth retardation.
8. Methods of diagnosis of intrauterine growth retardation .

9. Basic principles of prevention and treatment of intrauterine growth retardation.
10. What are the features of the management of pregnant women with intrauterine growth retardation?
11. Tactics of childbirth at intrauterine growth retardation.
12. Definition of "fetal distress", "newborn asphyxia", "newborn depression".
13. Causes of fetal distress and asphyxia of the newborn.
14. Pathogenesis of fetal distress.
15. Clinic of fetal distress.
16. Definition of the terms "isoimmunization", "hemolytic disease of the fetus and newborn".
17. Causes of immunological conflict.
18. Pathogenesis of isoimmune conflict.
19. Methods of diagnosis of isoimmune conflict in the antenatal and postnatal period.
20. Forms and severity of hemolytic disease of the fetus and newborn.
21. Methods of treatment of hemolytic disease of the fetus and newborn.
22. Algorithm for pregnancy and childbirth in isoimmune conflict.
23. Specific prevention of rhesus sensitization.

III. Practical experience:

1. Collection of anamnesis, assessment of complaints about the general and specific functions of the female body, and those that indicate the presence of immunoconflict pregnancy.
2. Establishing the term of pregnancy, the expected date of birth and fetal weight.
conflict pregnancy.
3. Establishing a preliminary diagnosis of immunological incompatibility of maternal and fetal blood.
4. Determining the tactics of pregnancy, childbirth, the postpartum period and the neonatal period in case of immunological incompatibility of maternal and fetal blood.
5. Proposing the scope of obstetric care in case of immunological incompatibility of maternal and fetal blood.
6. Carrying out external and internal obstetric examination of the pregnant woman.
7. Evaluation of the results of the study of the fetus and placenta (CTG, ultrasound, BPP, dopplerometry of the umbilical vessels) and determine the tactics of pregnancy depending on the results.
8. Assessment of the condition of the newborn on the Apgar scale, conducting the primary toilet of the newborn.

IV. Solving situational problems.

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

1. Primary PD is characterized by:

- A. Occurs up to 16 weeks of pregnancy.
- B. Occurs against the background of somatic, hormonal and genetic disorders.
- C. Leads to the development of SZRP.
- D. Affects perinatal loss rates.
- E. All of the above.**

2. Secondary PD is characterized by:

- A. Occurs after 16 weeks of pregnancy.**
- B. It is based on violations of trophoblast invasion.
- C. Is the main factor in the implementation of abortion in the first trimester.
- D. Is the main cause of miscarriage.
- E. All of the above.

3. Signs of fetal distress are:

- A. Heart rate up to 120 - 126 beats / min.
- B. Heart rate up to 110 - 116 beats / min.
- C. Heart rate up to 160 - 170 beats / min.
- D. Heart rate below 110, or above 170 beats / min.**
- E. Lack of fetal heartbeat.

4. The presence of late decelerations on CTG indicates...

- A. Fetal distress.**
- B. Is a variant of the gestational norm.
- C. Is a variant of the norm in the first period of childbirth.
- D. Interpreted based on the basal heart rate.
- E. It matters only when stimulating labor.

5. Fetal developmental delay syndrome:

- A. Always accompanied by fetal distress.
- B. Not accompanied by placental dysfunction.

C. Does not affect the condition of the newborn.

D. Does not depend on the course of pregnancy.

E. Is a consequence of primary placental dysfunction.

6. Bioprofile of the fetus at 6 points indicates:

A. Normal condition of the fetus.

B. Fetal distress.

C. Not informative until 34 weeks of pregnancy.

D. Is a sign of placental dysfunction.

E. Requires urgent delivery

7. Terminal blood flow is

A. Decreased blood flow in the vessels of the umbilical cord during diastole.

B. Increased blood flow in the vessels of the umbilical cord during diastole.

8. Doppler of umbilical vessels is informative:

A. In determining the degree of fetal developmental delay syndrome.

B. In determining the form of fetal developmental delay syndrome.

C. During gestation up to 30 weeks

D. During gestation from 30 weeks.

E. In determining the gestational age.

9. The first pregnant woman suffers from type 1 diabetes. She went to the doctor with complaints about the decrease in the number of fetal movements during the gestation period of 35 weeks. At cardiotocography the heart rate of a fruit is 186 beats / min., With decrease after movements to 116-122 beats / min. Diagnosis? Tactics?

Standard answer

1.1 I Pregnancy 35 weeks. Type 1 diabetes mellitus. Fetal distress during pregnancy.

1.2 Immediate caesarean section.

10. A young pregnant woman suffers from preeclampsia of moderate severity. She was taken to the maternity ward with complaints of profuse bloody discharge from the genital tract, abdominal pain. At examination, the gestation period is 36 weeks, the uterus is toned, local pain

on the anterior wall, arrhythmic heartbeat of the fetus 90-100 beats / min. Diagnosed with partial premature detachment of the placenta, acute fetal distress. Tactics?

Standard answer

1.1 Immediate caesarean section.

11. The newborn in childbirth is treated with primary weakness of labor by oxytocin. The gestation period is 39 weeks. The second period of childbirth. Anhydrous interval of 9 hours. Estimated fruit weight $3500.0 \pm 200\text{g}$. At auscultation of heartbeat of a fruit the doctor established: heartbeat is deaf, arrhythmic, 70-90 beats / min., After attempt decreases to 50 blows. Immediately performed vaginal examination: full opening of the cervix, the head of the fetus in the plane of exit from the pelvis, an arrow-shaped suture in a straight size, the amniotic sac is absent. Diagnosis? Tactics?

Standard answer

1.1 Pregnancy 39 weeks. 2 period of childbirth. Fetal distress

1.2 Perform the operation of applying the original obstetric forceps.

12. A pregnant woman was diagnosed with antiphospholipid syndrome. Pregnancy 4. History of 2 late miscarriages and premature detachment of the normally located placenta at 28 weeks, which ended in cesarean section three years ago. There are no children alive. The gestation period is 36 weeks. On ultrasound, the biophysical profile of the fetus is 4 points, zero blood flow in the umbilical vessels. According to fetometry, the weight of the fetus is 2600 ± 200 . What are the tactics of management?

Standard answer

1.1 Urgent caesarean section according to the indication of "fetal distress"

13. A woman suffers from hypertension, is carrying a second pregnancy, which is complicated by moderate preeclampsia. The gestation period is 34 weeks. On ultrasound, the weight of the fetus is 1400.0, the bioprofile is 4 points, reverse blood flow in the umbilical vessels. What is the diagnosis? What are the driving tactics?

Standard answer

1.1 Pregnancy 34 weeks. Fetal distress during pregnancy.

1.2 Urgent caesarean section according to the indication of "fetal distress"

14. A woman suffers from hypertension, has a second pregnancy. The first pregnancy ended in a caesarean section at 34 weeks of gestation due to severe preeclampsia. The term of this pregnancy after menstruation is 36 weeks. On ultrasound fetometry - 32 weeks, the bioprofile is 6 points, blood flow in the umbilical vessels is not disturbed. What is the complication of pregnancy? What is the doctors tactics?

Standard answer

1.1 Placental dysfunction, fetal developmental delay syndrome of III degree

1.2 Ultrasound control after 2 days. If the condition of the fetus deteriorates - premature birth.

Recommended reading:

1. Obstetrics and gynecology: textbook: in 2 books. Book 1 Obstetrics: Obstetrics / ВМ Ventskivsky, МО Shcherbina, VI Grishchenko [etc.]; - 4th ed., Ed. - К.: Медицина, 2020. - 424 p.

2. Obstetrics and gynecology: textbook: in 2 books. Book 2 Gynecology / VB Ventskivsky, МО Shcherbina, VI Grishchenko [etc.]; - 3rd ed., Ed. - К.: Медицина, 2020. - 376 p.

3. Workshop on obstetrics / II Bachynska - К .: "Medicine", 2021. - 104 p.

4. Workshop on phantom obstetrics / P. Yavirsky, V. Shatylo, T. Yavirska - К .: "Medicine", 2017-144 p.

5. Workshop on gynecology / A.M. Vavilova - К .: "Medicine", 2019. - 96 p.

6. Clinical obstetrics and gynecology / A. Brian, Magovan, Philip Ouden, Andrew Thomson; scientific editor of the translation by M. Shcherbina - К .: "Medicine", 2021. - 512 p.

7. Oxford Textbook of Obstetrics and Gynecology / Sabaratram Arulkumaran, Wiliam Ledger, Lynette Denny, Stergios Doumouchsis - Oxford University Press, 2020, 928 p.

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