EVALUATION MATERIALS FOR INTERIM CERTIFICATION FOR THE DISCIPLINE

PERINATOLOGY

Code, direction of training	31.05.01 General Medicine
Orientation (profile)	General Medicine
Form of education	full-time
Developing department	Obstetrics, gynecology and perinatology
Graduating department	Internal Medicine

TYPICAL TASKS FOR CONTROL WORK

Sample tasks and tests

Stage I: Formative assessment.
1.1 Points for oral quiz. Topics 1-5.
Topic: 1. Management of pregnant women in the antenatal period and identification of high-risk groups.
Points for discussion:
1. Organization of antenatal care for a pregnant woman.
2. Observation of the course of pregnancy in the antenatal clinic. Diagnosis and estimation of gestational age.
3. Physical examination methods, consultation of related specialists.
4. Clinical and laboratory examination. Serodiagnosis during pregnancy. Determination of blood group, Rh factor and pathological antibodies. Diagnostic control of blood pressure, body mass, coolant, fundal Height Measurement, fetal heartbeat.
5. Preparation for birth classes pregnant women (physio-psycho prophylaxis, "Mother's School").
6. Identification of high risk groups for perinatal pathology from the early stages of pregnancy: definition of PAPP-A, β-hCG. Genetic screening, medical genetic counseling, indications. Perinatal risk assessment scale.
7. Methods of monitoring the state of the fetus during high-risk pregnancy: hormonal research methods - the content of estriol and placental lactogen; determination of the α-fetoprotein level; biophysical methods (prenatal cardiotocography, ultrasound screening, dopplerometry).
Topic 2. Ultrasound examination during pregnancy. Dopplerometry in obstetrics. Invasive methods for assessing the state of the fetus during pregnancy.
Points for discussion:
1. Tasks of ultrasound research in the early stages of pregnancy. Indications. Ultrasound techniques. Transabdominal, transvaginal scanning.
2. Goals and objectives of ultrasound screening research in terms of 18-21 and 30-34 weeks of pregnancy. Fetometry
3. Criteria for maturity of the fetus.
4. Ultrasound diagnostics of congenital malformations.
5. The value of Doppler study of uteroplacental fetal blood flow.
6. The value and possibilities of prenatal diagnostics of congenital and hereditary diseases of the fetus.
7. Indications for invasive intrauterine interventions during pregnancy, the technique of their implementation.
Topic: 3. Intrauterine growth retardation.
Points for discussion:
1. Pathological aspects of Intrauterine growth retardation, theory: change in the spiral arteries; hemodynamic disorders; changes in the hemostatic system; metabolic disorders; changes in the placenta; changes in the organs of the fetus. Diagnosis of intrauterine growth retardation (the measurement of fundal height of the uterus, echographic fetometry).
2. The concepts of "symmetric" and "asymmetric" form of intrauterine growth retardation.
3. Additional methods for assessing the condition of the fetus with fetal growth retardation, interpretation: Ultrasonic placentography; Estimation of amniotic fluid volume. The study of the umbilical cord. Cardiotocography. Doppler sonography, critical state of fetal and placental blood flow.
4. Prevention, treatment and obstetric tactics for fetal growth retardation **.**
Topic 4. Preterm (premature) labour and birth.. Management of post term pregnancy.
Points for discussion:

1. Definition of the concepts of miscarriage, premature birth and recurrent miscarriage, premature birth, early and late spontaneous miscarriage. The frequency of this pathology in the structure of perinatal mortality, the social significance of the problem.
2. The role of etiological factors in the customary termination of pregnancy at various stages, the pathogenesis of termination, depending on the cause and duration of pregnancy.
3. Clinical signs of termination of pregnancy.
4. Methods of clinical and laboratory examination and their diagnostic value with habitual miscarriage.
5. Methods of etiopathogenetic treatment with recurrent miscarriage.
6. Peculiarities of the course and management of preterm labor. Methods for correcting cervical insufficiency during pregnancy.
7. Definition of the concepts of prolonged and postponed pregnancy, mature and overripe fetus. The frequency and relevance of pathology.
8. Mechanisms for the development of prolonged pregnancy (the immediate causes leading to over-staining), the identification of risk groups for the development of this pathology.
9. Changes occurring in the feto-placental system during pregnancy prolongation (changes in amniotic fluid, placenta and fetus).
10. Clinical manifestations of prolonged pregnancy, the possibility of antenatal differential diagnosis between prolonged and post-term pregnancy.
11. Tactics for management of pregnant risk groups for the occurrence of this pathology. Assessment of readiness of the birth canal for childbirth.
12. Principles of delivery method choice, indications for cesarean section. Methods of labor induction, the principles of late birth.
13. Complications of the mother and fetus in late delivery, their prevention.

Topic 5. Modern approaches to the management of Rh/ABO incompatibility during pregnancy.

Points for discussion:

1. Immunological incompatibility between mother and fetus.
2. Methods of diagnosis and treatment.
3. Management of pregnancy and childbirth.
4. Modern extracorporal methods of Rh/ABO incompatibility treatment.
5. Preventive measures.
6. Hemolytic disease of the fetus and newborn. Etiology, pathogenesis.
7. The course of pregnancy in the isoserological conflict.
8. Antenatal diagnosis.
9. Treatment of hypertensive heart disease in the postnatal period.
10. Prevention.

1.2. Sample tests (with keys)

1. The risk factors for the development of intrauterine growth retardation syndrome include the following ones:

a) adverse socio-economic conditions
b) chronic maternal diseases
c) congenital infections (rubella, herpes, listeriosis, syphilis, toxoplasmosis)
d) acute infectious diseases
e) burdened obstetric history
f) all of the above.

2. The clinical manifestations of intrauterine growth retardation include the following:

a) low birth weight and normal body length and head circumference
b) decrease in abdominal circumference
c) lack of body weight, reduction of subcutaneous fat, weakening of turgor tissue

d) respiratory distress syndrome
e) trophic skin disorders

3. Clinical manifestations of the hypoplastic variant of intrauterine growth retardation is all except for the following:

a) a lack of body mass, length and head circumference
b) the edges of the seams and the fontanel are soft, the cranial sutures are not closed
c) there is no ossification center in the femoral head
d) stigma of dysembryogenesis in a small amount
e) congenital malformations.

4. Children with indromy, fetal growth retardation often suffer from the following:

a) hypoglycemia with hypocalcemia
b) respiratory distress syndrome
c) polycythemia
d) hyperkalemia and hypernatremia
e) vitamin K deficiency

5. In the asymmetric form of fetal growth retardation, the prognosis for the newborn is rather

a) favorable
b) unfavorable

6. With a symmetric form of fetal growth retardation, the prognosis for a newborn is rather:

a) good
b) unpleasant

Specify all correct answers.

7. Therapy for newborns with fetal growth retardation includes:

a) breastfeeding correction
b) electrolyte exchange correction
c) correction of cardiovascular activity
d) correction of gastrointestinal functions
e) antibiotics
f) insulin therapy

Key to the test

№	Answer	№	Answer
1	a,b,c,d	5	a
2	a,b,c,d	6	b
3	e	7	a, b, d
4	a,c,e		

1.3. Sample of case problem.

Patient R., 28 years old, was taken by ambulance to the maternity hospital in the gestational age of 32 weeks with complaints of headache, difficulty in nasal breathing, decrease in diuresis.

The anamnesis is not complicated. This is her first pregnancy. During the gestation period of 25 weeks with edema and hypertension, she received inpatient treatment for 2 weeks at the department of pregnancy pathology. Objectively on admission: pale pink skin on the legs, anterior abdominal wall with marked edema, pasty face and hands. Pulse: 86 beats / min, rhythmic, blood pressure: 170/100. The abdomen is enlarged by the pregnant uterus. The position of the fetus is longitudinal, presents the pelvic end of the fetus above the entrance to the pelvis. Fetal heartbeat is rhythmic, 150 beats / min. Vaginal examination revealed "ripening" cervix uterus. Diuresis is reduced to 400.0 mm per day. Surveyed: in the general analysis of blood Hb 82 g / l, er. 2.7 $\times 10^{12}$ / l, L 10.2×10^{9} / l, ESR 23 mm / g, total protein 48 g / l; in the general analysis of urine: urine turbid,

beats weight 1030, protein 1.65 g / l, hyaline cylinders 2-3 in sight. In the fundus of the second degree of angiospasm, easing contour of the optic nerve disc from the temporal sides. Echography revealed lagging fetometric indicators for 2 weeks, lack of water, with Doppler, an increase in resistance to blood flow in both uterine arteries

1. Your presumptive diagnosis.
2. What should be the tactics of the doctor.

Key to the task.
1. First pregnancy 32 weeks. Pelvic presentation. The "ripening" cervix. Gestosis, the classic version of severe, early onset. Pre-eclampsia. Chronic placental insufficiency, subcompensation, uteroplacental hemodinamics of 2nd degree, fetal growth retardation of the I degree. Anemia of moderate severity.
2. Emergency Caesarean section on the background of intensive treatment of preeclampsia.

1.4. Guidelines for the case history (Writing a clinical history).

The student chooses the nosological form independently, develops the history of the disease according to the proposed scheme
The main stages:
Title page (separate page)
1. Passport part.
2. Complaints: the main and those, found in the interview on organ systems.
3. Anamnesis of the main and associated diseases.
4. Anamnesis of life.
5. Data from an objective study of the patient.
6. Justification of the preliminary diagnosis and its formulation.
7. Examination plan.
8. Data of laboratory and instrumental diagnostics, medical reports of consultants.
9. Final clinical diagnosis (substantiation and formulation).
10. Differential diagnosis.
11. Treatment of the patient and his rationale.
12. Forecast.
13. Prevention (primary and secondary).
14. Epicrisis.
15. Diary of Curation
16. References

STANDARD QUESTIONS FOR ASSESSMENT

(CREDIT). 10 terms.

Midterm assessment is carried out in the form of credit. Tasks for the credit include poits for oral quiz and tests.

Tasks for competence assessment «Knowledge»
List of oral quiz: 1. Laboratory and cytological diagnostic methods in gynecology 2. Ultrasound examination of the pelvic organs. 3. MRI examination of the pelvic organs

4. Correct assessment of the history and characteristics of the disease in high-risk pregnant women;

5. Implementation of ultrasound examination of the organs of the digestive, urinary, cardiovascular systems, superficial organs and tissues of the pregnant woman in compliance with safety measures;

6. Conducting planned transabdominal and transvaginal echography at the time of prenatal diagnosis in the II and III trimesters of pregnancy in compliance with safety measures;

7. Conducting transabdominal and transvaginal echography in the first trimester of pregnancy in order to assess uterine pregnancy, fetal viability, multiple pregnancy, gross congenital malformations, markers of chromosomal pathology, the state of extraembryonic structures, tumor processes of the uterus, uterine appendages, isthmic-cervical insufficiency and in compliance with safety precautions;

8. Conducting unscheduled transabdominal and transvaginal echography of the uterus, uterine appendages in the development of emergency conditions in the I, II and III trimesters of pregnancy in compliance with safety measures;

9. Conducting and interpreting the data of transabdominal and transvaginal echography, dopplerometry in pregnant women with diabetes mellitus;

10. Conducting and interpreting the data of transabdominal and transvaginal echography, dopplerometry in pregnant women with multiple pregnancies;

11. Correct assessment of indications and contraindications for the preservation of gestation in pregnant women with congenital malformations in the fetus and chromosomal pathology;

12. Correct selection and assessment of functional research methods in a pregnant woman with perinatal fetal pathology;

13. The correct choice and assessment of functional research methods in a pregnant woman with tumor processes of the uterus, uterine appendages, isthmic-cervical insufficiency;

14. Carrying out cardiotocography to assess the condition of the fetus in the II and III trimesters of pregnancy;

15. Development of a differential plan of pregnancy management in patients with tumor processes of the uterus, uterine appendages, isthmic-cervical insufficiency;

16. Development of a differential plan for the management of pregnancy and childbirth in patients with fetal perinatal pathology, including antenatal hypoxia.

Tasks for competence assessment «Abilities»

List of tests

1. 1. The optimal timing for screening ultrasound in the II trimester of pregnancy (test with one correct answer):

A. 16-18 weeks;

B. 14-16 weeks;

S. 20-22 weeks;

D. 24-28 weeks;

E. 18-20 weeks.

2. Echographic criterion for low attachment of the placenta in the third trimester of pregnancy is the detection of its lower edge from the internal os at a distance (test with one correct answer):

A. <9 cm;

B. <7 cm;

S. <10 cm;

D. <11 cm;

E. <8 cm.

3. Echographic criterion for premature placental abruption (test with one correct answer):

A. the presence of an echo-negative space between the wall of the uterus and the placenta;

B. the presence of large round anechoic formations in the thickness of the placenta;

C. thickening of the placenta;

D. premature maturation of the placenta;

E. echographic criteria are missing.

4. Echographic signs of isthmic-cervical insufficiency (test with one correct answer):

A. thickening of the walls of the uterus in the lower segment;

C. funnel-shaped expansion of the internal os of the cervix;

C. narrowing of the internal os of the cervix;

D. lengthening of the cervix;

E. uneven contours of the ovum.

5. Doppler signs of HDN 1A Art. (test with multiple correct answers):

A. increase in SDO and IR in the arteries of the umbilical cord;

B. increase in SDO and IR in the right uterine artery;

C. increase in LMS and IR in the middle cerebral artery;

D. increased SDO and IR in both uterine arteries;

E. increased LMS and IR in the fetal aorta.

6. Ultrasound - signs of post-term pregnancy (test with one correct answer):

A. oligohydramnios, calcifications in the placenta, Beklar's nucleus more than 6 mm;

B. polyhydramnios;

C. shortening of the cervix;

D. 2 tbsp. maturity of the placenta;

E. thickening of the placenta.

7. Ultrasound - signs of threatened abortion (test with several correct answers):

A. lack of water;

B. hypertonicity of the myometrium;

C. suspension in amniotic fluid;

D. polyhydramnios;

E. expansion of the internal pharynx more than 5 mm.

8. For congenital malformations of the fetus - diaphragmatic hernia - echographic signs are characteristic (test with several correct answers):

A. the presence of free fluid in the abdominal cavity of the fetus;

B. absence of a bladder;

C. displacement of the heart to the right or left;

D. the presence of free fluid in the chest cavity of the fetus;

E. the presence of cystic formations in the chest cavity.

9. Fetal hydrocephalus is characterized by echographic signs (test with one correct answer):

A. expansion of the lateral ventricles of the brain;

B. narrowing of the lateral ventricles of the brain;

C. cysts of the choroid plexus;

D. absence of the cerebellum.

10. The purpose of ultrasound examination in multiple pregnancies is (test with one correct answer):

A. Determination of the number of fruits, their position and presentation;

B. Comparison of fetal fetometry data;

C. Establishing the localization and number of placentas;

D. Clarification of the type (chorionicity) of multiple pregnancies;

E. All of the above.

Keys

№	Answer
1	C
2	E
3	A
4	B
5	BD
6	B
7	BE
8	CE
9	A
10	E