

Practical skills for state exam

(Obstetrics and Gynecology)

- Bimanual vaginal examination
- Bacterioscopic and cytomorphological examination, speculum examination of uterine cervix
- Clinical examination of the mammary glands
- Measurements of the female pelvis
- External obstetric examination. Fetal orientation in the uterus
- Auscultation of the fetus. Interpretation of CTG
- Determination of estimated date of delivery and fetal weight
- Determination of the condition of the newborn according to Apgar score

1. Bimanual vaginal examination

Scenario (5 minutes duration):

- 1) put on gloves;
- 2) with the first and second fingers of the left (right) hands to dissolve the labia majora; middle finger of the "dominant" arm arranged at the level of the back adhesion, carefully press it to open the entrance to the vagina;
- 3) carefully and slowly enter the middle finger, then the index finger to the vagina on the back wall to the fornix and cervix, the fourth and fifth fingers lead to the palm, thumb to the top;
- 4) determine the length of the vaginal part of the cervix (cm);
- 5) determine the consistency of the cervix (dense, soft);
- 6) determine the passability of the external poster of the cervical canal (closed, skipping the tip of the finger);
- 7) evaluate the painfulness of a cervical excursion;
- 8) put the other hand gently on the abdomen (above the symphysis) and apply moderate pressure to determine the bottom of the body of the uterus;
- 9) bring out the body of the uterus between two hands and determine:

- the position of the uterus relative to the cervix (anteflexio, retroflexio)
- the size of the body of the uterus (normal, reduced, enlarged)
- consistency of the body of the uterus (tight-elastic, soft, condensed)
- the mobility of the body of the uterus (relatively mobile, limited mobility)
- the sensitivity to palpation (painful, painless)

10) place your fingers in the side fornixes and using both hands to palpate the vaginal fornixes, uterus, ovaries and fallopian tubes, to determine the size, mobility and painfulness of the uterine appendages;

11) determine the capacity of vaginal fornixes.

2. Bacterioscopic and cytomorphological examinations. Speculum examination of vagina and uterine cervix.

Scenario (5 minutes duration):

- 1) put on gloves;
- 2) take a microscope slide U / C / V;
- 3) from urethra with a Volkmann spoon from a depth of 1.5-2 cm, take the material by scraping and place to the microscope slide in section U;
- 4) take a gynecological speculum in the dominant hand;
- 5) with the fingers of the second hand carefully dilute the labia, slowly introduce a closed speculum into the vagina without touching the urethra and clitoris;
- 6) turn the gynecological speculum in the vagina and open for examination of the cervix;
- 7) evaluate the vaginal part of the cervix and the walls of the vagina:
 - color and condition of the vaginal mucosa (hyperemia, edema)
 - characteristics of vaginal discharge (physiological, pathological)
 - cervical shape (conical, cylindrical)
 - the length of the vaginal cervix (cm)

- the shape of the external os (round, slit-like, the presence of ruptures)

- characteristics of excretions from the cervical canal (mucous, bloody, purulent, watery)

8) take a material for bacterioscopic examination:

- with a cotton swab, remove excess secretions;

- the other end of the Volkmann spoon is carefully inserted into the cervical canal, take the material by scraping, place to the microscope slide in section C;

- take the material with spatula from the back vault, place to the microscope slide in section V;

9) take a microscope slide with 2 sections;

10) take a material for cytomorphological examination:

- by using a curly spatula (or bent with a 90° cytosol) take the material from the surface of the uterine cervix by scraping (rotation 360°), place the material in the section;

- inject a brush into the cervical canal, rotate it 360° , place the material in the section;

11) carefully remove the speculum.

3. Clinical examination of the mammary glands

Scenario (duration 5 minutes):

1) put on gloves;

2) inspect the mammary glands: shape, color, nipples, areas around the nipple (asymmetry, indraining, etc.);

3) examine the tissue of the mammary glands clockwise or quadrants: detect consistence, elasticity, sensitivity, presence / absence of tumors;

4) if the tumor is found, detect it shape, size, consistency, location, mobility, correlation with the breast tissue, pain;

- 5) perform palpation of lymph nodes: supraclavicular, subclavicular and axillary;
- 6) detect the appearance of pathological excretions from the mammary glands.

4. Measurements of the female pelvis

Scenario (duration 5 minutes):

- 1) put on gloves;
- 2) place the buttons of pelvic meter on the antero – superior spines of iliac bones (indicate the normal D. spinarum = 25-26 cm);
- 3) move the buttons of pelvic meter on the most distant locations of iliac bones cristae (indicate normal D. cristarum = 28-29 cm);
- 4) place the buttons of pelvic meter on trochanteria major of femoral bones (indicate normal D. trochanterica = 30-31 cm);
- 5) place the patient on her left side, with her left leg bent in knee joint. Measure the distance between the upper margin of symphysis to fossa suprasacralis (indicate normal C. externa = 20-21 cm);
- 6) measure the distance from upper margin of symphysis to sacral promontory (indicate C. diagonalis = 12,5-13 cm).

5. External obstetric examination. Fetal orientation in the uterus.

Scenario (duration 5 minutes):

- 1) put on gloves;
- 2) by palpation of abdomen with ribs of both hands estimate the height of the uterus and fetus located in the uterine fundus;
- 3) put the palms of your hands over left and right sides of uterine anterior wall;
- 4) palpate the anterior wall of uterus with fingers placed on respective side, fixing the opposite side of uterus with your other hand;
- 5) determine the fetal lie (longitudinal, transverse, oblique), fetal position (left/right, anterior/posterior) in the present situation (phantom);

- 6) place the hand over the upper side of pubic arch and palpate the presenting part of the fetus;
- 7) determine the fetal presentation (cephalic, breech) in the present situation (phantom);
- 8) turn your back to the patient and place the palms of your hands over the anterior wall of uterus;
- 10) move your palms from up to down and from external to medium directions, try to fasten your finger over the adjacent part of fetus;
- 11) determine the localization of the fetal presenting part in the present situation (phantom);
- 12) answer to the examiner with interpretation of fetal lie, position (left/ right, anterior/posterior), presentation (cephalic, breech) in the present situation (phantom).

6. Auscultation of the fetus. Interpretation of CTG.

Scenario (duration 5 minutes):

- 1) put on gloves;
- 2) determine of fetal orientation in the present situation (phantom) by visual examination:
 - fetal lie (longitudinal, transverse, oblique)
 - fetal presentation (cephalic, breech)
 - fetal position (left, right, anterior, posterior, transverse)
- 3) show on a phantom and describe the point of auscultation of fetal heartbeat in the present situation (on phantom);
- 4) count on a phantom fetal heart rate during 6 second then result should be multiplied by 10;
- 5) evaluate the HR of fetus (normal, bradycardia, tachycardia) on a phantom;
- 6) evaluate the CTG results:

- normal
- severe tachycardia
- severe bradycardia
- monotonic rhythm
- late decelerations

7. Determination of estimated date of delivery and fetal weight

Scenario (duration 5 minutes):

- 1) put on gloves;
- 2) determine the estimated date of labor based on data of the last menstruation using Negele's equation: first day of last menstruation plus 7 days and minus 3 months from the obtained result;
- 3) finger palpation of the upper external side of symphysis, press the zero mark of the soft measuring tape to the established;
- 4) put the soft measuring tape along the middle line of the abdomen;
- 5) determine the uterine fundus with the rib of your hand by pressing gently and moving from symphysis to xiphoid;
- 6) determine the height of the uterus in cm;
- 7) wrap the soft measuring tape around the abdomen, frontal side – on the belly button level, posterior side – on the lumbar area, mark the result in cm;
- 8) calculate the estimated fetus weight using the Giordania's method: abdomen circumference multiply by uterine fundal height ± 200 gr.

8. Determination of the condition of the newborn according to Apgar score

Scenario (duration 5 minutes):

- 1) read the situation task;
- 2) assessment of the color of the skin of the newborn:
 - pink - 2 points

- acrocyanosis - 1 point
- generalized pallor of the skin or generalized cyanosis - 0 points

3) assessment of newborn's breathing:

- respiratory movements in full volume, cry loud - 2 points
- respiratory movements irregular with the involvement of auxiliary muscles, weak scream - 1 point
- absence of respiratory movements - 0 points

4) assessment of newborn's heart rate:

- more than 100 beats per minute - 2 points
- less than 100 beats per minute - 1 point
- absence of palpitations - 0 points

5) evaluation of muscle tonus of the newborn:

- active movements of the newborn in full - 2 points
- reduced tone - 1 point
- no movements, atony - 0 points

6) evaluation of reflex responses of the newborn:

- reaction in the form of movements, cough, sneezing, loud crying - 2 points
- weak reaction (grimace) - 1 point
- absence of any reactions - 0 points

7) determine the total score

8) determine the general condition of the newborn according to the calculated scores (normal condition, moderate or severe asphyxia)