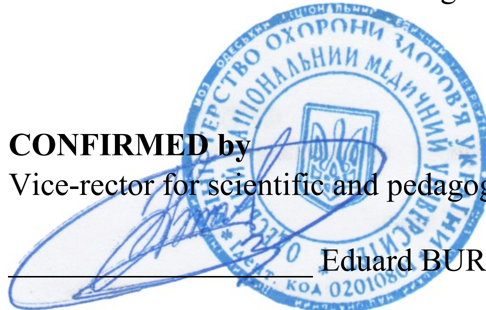
MINISTRY OF HEALTH OF UKRAINE
ODESA NATIONAL MEDICAL UNIVERSITY

Faculty Medical №1

Department of simulation medical technologies



CONFIRMED by
Vice-rector for scientific and pedagogical work

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September 1, 2023

METHODICAL RECOMENDATION

FOR INDIVIDUAL WORK OF HIGHER EDUCATION ACQUISITIONS OF THE PRACTICE

«SIMULATION MEDICINE»

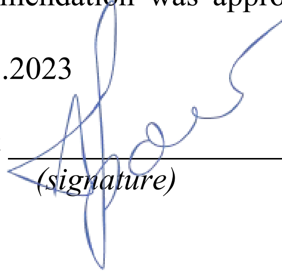
Faculty, course: International, 6 year

Practice: Simulation medicine

Approved:

The methodical recommendation was approved at the meeting of the department of simulation medical technologies
Protocol No. 1 of 28.08.2023

Head of the department ___________________ Oleksandr ROGACHEVSKYI
(signature)



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1. Topic "Physiology of childbirth. Labor analgesia" - 18 hours

2. Relevance of the topic:
Knowledge of the physiology of childbirth initiates clinical obstetrics. Careful compliance and, if necessary, as close as possible imitation of physiological processes in childbirth is a direct and natural way to reduce maternal and perinatal morbidity and mortality. Studying the main stages of the course and conduct of physiological childbirth allows you to master in practice the most important methods of examination of childbirth, the ability to assess the obstetric situation, the provision of appropriate assistance in physiological childbirth, taking into account data based on the principles of evidence-based medicine. An important component of this class is the study of the doctor's tactics during childbirth at all stages, elimination of birth trauma, prevention of fetal distress and newborn asphyxia. The introduction of modern perinatal technologies (partner childbirth, regional methods of analgesia, simultaneous stay of the mother and baby with observance of the thermal chain) helps to reduce the frequency of complications during childbirth.

3. Specific goals:
1. Analyze the review of external and internal obstetric research (on a phantom), auscultation of the fetal heartbeat (auscultation, CTG).

2. Explain the concept of harbingers of childbirth, the preliminary period,
signs of the onset of labor, causes of labor, regulation of labor; biomechanism of childbirth in anterior and posterior types of occipital presentation.

3. Interpret:
- features of the clinical course of the first period of childbirth,
- peculiarities of conducting the first period of childbirth,
- basic principles of partogram management,
- features of the clinical course of the II period of childbirth,
- features of the II stage of childbirth,
- features of the clinical course of the III period of childbirth,
- peculiarities of the management of the III period of childbirth,
- principles of assessment of the condition of the newborn according to the Apgar scale,

4. Demonstrate active and expectant management tactics of the III stage of labor (on a phantom).

4. Interdisciplinary integration:

№	**Disciplines**	**Know**	**Be able**
Providing disciplines			
1	Anatomy	women's structure genitals	Describe the structure of the female pelvis
2	Propaedeutics of internal diseases	Subjective and objective methods of examination	Collect history and conduct palpation and auscultation
Provided disciplines			
3	Neonatology	basic principles and functional duties of a doctor during physiological childbirth	Assess the condition of the newborn according to the Apgar scale. Carry out the primary toilet of the newborn, ensuring the principles of the "thermal chain"
Intrasubject integration			

4	Physiology of pregnancy. Methods of examination of pregnant women	Topography of the fetus in the uterus, physiology of pregnancy, gravidogram	Determine the topography of the fetus in the uterus. Make a plan for maintaining a physiological pregnancy. Assess the nature of the partogram. Conduct external and internal obstetric examination and auscultation of the fetus.
5	The female pelvis and the fetus as an object of childbirth	The dimensions of the female pelvis, the dimensions of the fetal head and body. The structure of the fetal head.	Measure and estimate the size of the female pelvis. To recognize the elements of the structure of the fetal head during an internal obstetric examination.

5. Tasks for independent work during preparation for class
5.1. A list of the main terms, parameters, characteristics that it has
learn the student in preparation for the lesson:
Normal (physiological) childbirth is childbirth with spontaneous onset and progression of labor in a pregnant woman at 37-42 weeks of pregnancy, occipital presentation of the fetus, with a satisfactory condition of the mother and the newborn after childbirth. With the beginning of childbirth, a pregnant woman is called a woman in labor.

The preliminary period is rare, weak cramp-like pains in the lower abdomen and in the lower back, which occur against the background of normal uterine tone lasting up to 6-8 hours, which lead to softening, smoothing and opening of the cervix, deployment of the lower uterine segment, lowering of the anterior part fetus

Cramps are involuntary contractions of the uterine muscles. The intervals between breaks are called pauses.
Regular labor - the presence of 1-2 or more contractions of the uterus within 10 minutes, lasting 20 or more seconds, which leads to structural changes in the cervix - its smoothing and opening.
The biomechanism of childbirth is a complex of translational, rotational, flexion and extension movements that the fetus makes while passing through the birth canal.

The configuration of the fetal head is the process of adapting it to the birth canal of a woman.
5.2 Theoretical questions for the lesson:

1. Concept of harbingers of childbirth, preliminary period.
2. Signs of the onset of labor.
3. Methods of assessing the organism's biological readiness for childbirth.
4. The method of assessing the state of the cervix according to the Bishop scale.
5. Causes of childbirth, regulation of childbirth.
6. Biomechanism of childbirth in anterior and posterior types of occipital presentation.
7. Features of the clinical course of the first period of childbirth.
8. Peculiarities of conducting the 1st period of childbirth.
9. Basic principles of keeping a partogram.
10. Features of the clinical course of the II period of childbirth.
11. Peculiarities of conducting the II period of childbirth.
12. Features of the clinical course of the III period of childbirth.
13. Peculiarities of management of the III period of childbirth.
14. Principles of assessing the condition of a newborn according to the Apgar scale.
15. The primary toilet of a newborn, compliance with the thermal chain.

16. Modern methods of childbirth analgesia: non-medicated and medicated.
5.3. Practical works that will be performed in the lesson:

1. External obstetric examination, auscultation of the fetal heartbeat.
2. Internal obstetric examination (on a phantom).
3. Determination of the beginning of childbirth.
4. Evaluation of the degree of maturity of the cervix according to Bishop.
5. Determine the beginning of the first period of labor, objectively assess the nature of labor (dynamics of opening of the cervix, frequency, strength and duration of contractions).
6. Keep a partogram.
7. Determine and evaluate the fetal heartbeat (auscultatively, CTG).
8. Provide assistance during childbirth and provide psychophysiological analgesia during childbirth.
9. Demonstrate active management tactics of the III stage of labor (on a phantom).
10. Demonstrate the expected management tactics of the III stage of labor (on a phantom).
11. Determine the integrity of the droppings.
12. Determine the total blood loss during childbirth.
13. Assess the condition of the newborn according to the Apgar scale.
14. Carry out the primary toilet of the newborn, ensuring the principles of the "thermal chain".
6. Topic content:

Clinical protocol for obstetric care
"Normal childbirth"

A normal birth is a singleton birth with spontaneous onset and progression of labor at 37-42 weeks of pregnancy in occipital presentation of the fetus, the course of which occurred without complications throughout the entire period of labor, with a satisfactory condition of the mother and the newborn after delivery.

If childbirth in high-risk pregnant women (with pregnancy pathology or somatic pathology) has a normal course, it is necessary to use the recommendations of this clinical protocol regarding childbirth in this group of women, provided that the delivery ends without complications - such childbirth is considered normal.

The following are not grounds for exclusion from normal childbirth:
- presence of premature rupture of fruit membranes;
- carrying out an amniotomy without subsequent induction of labor;
- 1st degree perineal tear.

At the current stage of the organization of obstetric care in Ukraine, it is optimal to conduct a normal birth in the conditions of an obstetric hospital with the provision of the right of the woman in labor to involve relatives to support her during childbirth.

The main goal of providing assistance during childbirth is to ensure safety for the woman and the child with minimal interference in the physiological process by:
- careful monitoring of the condition of the mother, the fetus and the progress of childbirth;
- creation of conditions for the provision of emergency care to the woman in labor/childbirth and the newborn;
- carrying out measures aimed at preventing infectious and purulent-inflammatory complications;
- implementation and strict observance of the "thermal chain" principles.

Principles of normal childbirth:
- determination of the birth plan and mandatory informed agreement with the woman/family
- encouragement of emotional support for the mother during childbirth (organization of partner births);
- monitoring of the state of the mother, the fetus and the progress of childbirth;
– use of the partogram to make a decision about the course of childbirth, as well as the need and volume of interventions;
- widespread use of non-medicinal means for labor pain relief;
- encouraging a woman to move freely during childbirth and ensuring the possibility of freely

choosing a position for childbirth;
- assessment of the condition of the child at birth, ensuring "skin-to-skin" contact between the mother and the newborn, attachment to the mother's breast for the appearance of the search and sucking reflex;
- prevention of postpartum bleeding caused by uterine atony by using the technique of active management of the third period of labor.
Diagnosis and confirmation of childbirth:
o after the 37th week, a pregnant woman develops cramp-like pains in the lower abdomen and sacrum with the appearance of mucous-bloody or watery (in the case of discharge of amniotic fluid) discharge from the vagina;
- presence of 1 seizure within 10 minutes, which lasts 15-20 seconds;
- change in the shape and location of the cervix - its progressive shortening and smoothing. Opening of the cervix - an increase in the diameter of the lumen of the cervix (measured in centimeters);
- gradual lowering of the fetal head to the small pelvis relative to the plane of entrance to the small pelvis (according to external obstetric examination) or relative to lin.interspinalis (during internal examination)

Diagnosis of periods and phases of childbirth:

Symptoms and signs	Period	Phase	
The neck is not open	False birth /absence of maternity activity/		
The cervix is opened less than 3 cm	First	Latent	
The cervix is opened by 3-9 cm. The rate of opening of the cervix is not less (or more) - 1 cm/hour. The beginning of the lowering of the fetal head	First	Active	
Full opening of the cervix (10 cm). The head of the fetus in the pelvic cavity. There are no calls for violence	Second	Early	
Full opening of the neck (10 cm). The anterior part of the fetus reaches the pelvic floor. Childbirth is starting to get long	Second	late (powerful)	
The third period of childbirth begins with the birth of the child and ends with the expulsion of the litter	Third		

The sequence of actions in case of a normal course of childbirth:

During the hospitalization of a woman in labor in an obstetric hospital in the reception and examination department, the obstetrician-gynecologist on duty:

- thoroughly familiarizes herself with the woman's exchange card regarding the course of this pregnancy. Pays attention to the data of the general, infectious and obstetric and gynecological anamnesis, clinical and laboratory examinations and gravigram data;
- investigates complaints;
- to assess the condition of the woman in labor, she performs an examination: general examination, measures body temperature, pulse, blood pressure, breathing rate, examination of internal organs;
- measures the standing height of the bottom of the uterus, the circumference of the abdomen and the size of the pelvis. Determines the term of pregnancy and the expected weight of the fetus;
- asks about the feeling of the fetal movements by the delivery woman herself and performs auscultation of the fetal heartbeat;
- conducts an external and internal obstetric examination: determines the position, type and position of the fetus, the nature of labor, the opening of the cervix and the period of labor, finding the head of the fetus relative to the planes of the pelvis;
- establishes an obstetric diagnosis, determines the delivery plan and coordinates it with the woman giving birth.

Routine enema and pubic shaving of the parturient are not recommended [A].

Junior nurse:

- offers the woman to take a shower, put on clean home clothes (if not, hospital underwear); the partner also needs a change of clothes to clean home clothes (if not available - a disposable set);
- accompanies the woman in labor and her partner to the individual delivery room.

Observation and assistance of the woman in labor during the 1st stage of labor

The results of monitoring the progress of childbirth, the state of the mother and the fetus are entered by the obstetrician-gynecologist in the partogram (Appendix 1).

The correct filling and interpretation of the partogram contributes to the early detection of abnormalities in the course of childbirth, abnormalities in the condition of the mother or fetus, and helps to make a timely informed decision about the further tactics of childbirth and determine the amount of necessary interventions. Observation of the state of labor and the fetus in the first period of childbirth includes the following routine procedures:

Evaluation of the condition of the fetus:

The heartbeat of the fetus during childbirth is recorded by:

o periodic auscultation using an obstetric stethoscope, a manual Doppler analyzer;

or

o according to indications - by means of electronic fetal monitoring (cardiotocography)

To obtain reliable results of periodic auscultation, the following technique should be followed:

- the woman in labor is in the position on her side;
- auscultation begins after the end of the most intensive phase of reception;
- auscultation lasts at least 60 seconds.

Auscultation should be performed every 30 minutes during the latent phase and every 15 minutes during the active phase of the first stage of labor.

The normal heart rate of the fetus is within 110-170 beats per minute.

In the case of a change in the fetal heart rate, which is outside the normal range, it is necessary to change the position of the woman's body (the position on the back should be avoided)

and repeat auscultation after the end of the most intense phase of the next contraction, following the above-described technique.
The transition from periodic auscultation to electronic fetal monitoring (CTG) is indicated in the following cases:
– the heart rate of the fetus remains outside the normal range after a change in the position of the woman's body;
- the basal heart rate of the fetus is less than 110 or more than 170 beats per minute;
- during periodic auscultation, any episodes of bradycardia are detected, which do not disappear after changing the woman's position;
- birth augmentation with oxytocin was started;
– amniotic fluid stained with meconium spilled out.
B
The routine use of CTG for all women in labor is not advisable due to the high percentage of false positive results and the increase in the frequency of interventions, including operative deliveries [A]

If there is a rupture of the amniotic sac (spontaneous or artificial), attention is paid to the color and amount of amniotic fluid.

Assessment of the mother's general condition:
Measurement of body temperature - every 4 hours; determination of pulse parameters - every 2 hours; blood pressure - every 2 hours; the amount of urine is determined every 4 hours;

Assessment of labor progress:
In order to assess the progress of childbirth, the rate of opening of the cervix, the frequency and duration of contractions, as well as the presence of the advancement of the fetal head into the pelvic cavity are determined:

Opening of the cervix

The rate of cervical dilation is assessed by an internal obstetric examination, which is carried out every 4 hours. An additional internal examination is carried out in the presence of indications:
- spontaneous rupture of fruit membranes;
- abnormal fetal heart rate (less than 110 or more than 170 beats per minute);
– prolapse of the umbilical cord;
– in case of suspicion of incorrect presentation/insertion of the fetal head;
- delays in the progress of childbirth;
– bleeding (examination in the operating room).

If, after an additional internal obstetric examination, a decision is made to continue conservative delivery, the next obstetric examination is carried out 4 hours after the last one.
The results of the evaluation of the opening of the cervix are recorded in the partogram.

Opening of the cervix in the latent phase

The latent phase lasts up to 8 hours. The normal progression of labor in the latent phase of the first period is characterized by gradual smoothing and opening of the cervix at a speed that ensures the transition to the active phase at any time during the 8 hours of observation.
The opening of the cervix 3 and > cm indicates the transition to the active phase I of the labor period
If during 8 hours of observation the periodic contractions of the uterus disappear or slow down significantly, a conclusion should be drawn regarding false labor. In case of spontaneous cessation of uterine contractions o there is no need to conduct a vaginal examination if there are no other indications for its conduct.

o If, after 8 hours of observation, periodic contractions of the uterus continue, and the opening of the cervix remains less than 3 cm, the presence of structural changes in the cervix should be evaluated
▪ If there are no structural changes in the cervix, a conclusion should be drawn in favor of feigned contractions.
▪ If there are structural changes of the cervix (softening, smoothing, opening), the degree of maturity of the cervix should be assessed according to the Bishop scale.
- If the cervix is "mature" (6 or more points), a conclusion is made in favor of a delayed latent phase of the first period of labor.
- If the cervix is "immature" (5 or less points), the management tactics should correspond to the management of feigned labor

Evaluation of the degree of "maturity" of the cervix according to the Bishop scale (B)

Parameters	**Points**		
	0	**1**	**2**
The position of the cervix in relation to the leading axis of the pelvis	Displaced to the sacrum	Between the sacrum and the leading axis pelvis	Along the axis of the pelvis
Cervix length (cm)	≥ 2	1-2	1≤
The consistency of the cervix	Dense	Softened	Soft
Opening the outer eye	Closed	1	≥ 2
Location of the anterior part of the fetus	Moving over entrance to small pelvis	Pressed to the entrance to the small pelvis	Suppressed or fixed in the input in the small pelvis

Note:

0-2 points - "neck is not mature"

3-5 points – "the cervix is not mature enough"

≥-6 points – "mature cervix"

Opening of the cervix in the active phase

The normal progression of childbirth in the active phase of the first period is characterized by the opening of the cervix at a speed of at least 1 cm/hour.

If the cervical dilation rate is less than 1 cm/h (the cervical dilation graph is to the right of the Attention Line on the partogram), this indicates a “prolonged active phase” that may be associated with weak labor or a clinically narrow pelvis .

The rate of opening of the cervix is less than 1 cm/h in the presence of an entire amniotic sac is an absolute indication for amniotomy.

Routine early amniotomy (up to 5 cm opening of the cervix) is not recommended in case of a normal delivery [A].

Frequency and duration of periods

Assessment of seizure frequency and duration is performed every hour in the latent phase and every 30 minutes in the active phase. Count the number of strokes in 10 minutes. The obtained data are entered into the partogram.

The presence of 2 contractions in 10 minutes in the latent phase is considered adequate labor activity, in the active phase - 3-5 contractions within 10 minutes, each of which lasts 40 seconds or more.

Advancement of the fetal head

Advancement of the fetal head is determined by external and internal obstetric examination. The results are recorded in the partogram.

Advancement of the fetal head may not be observed until the cervix dilates approximately 7-8 cm.

Conditions for ensuring normal childbirth:

• an individual delivery room, which should be as close as possible to home conditions;

• personal psychological support of the woman in labor by her husband or her chosen partner, who must be prepared to participate in childbirth;

• achievement of mutual understanding, psychological support of childbirth by medical personnel;

• explanation of the necessity of carrying out each procedure and manipulation and obtaining the woman's permission to carry them out;

• maintenance of a friendly atmosphere during childbirth,

• respect for the woman's wishes, ensuring confidentiality;

• maintaining the cleanliness of the maternity ward and its surroundings:

- encouragement to take a bath or shower independently during childbirth;

- before each internal obstetric examination, the external genitalia and perineum of the parturient are washed with clean, warm water.

• ensure the mobility of the maternity ward:

- the woman is encouraged to be active during childbirth;

- help to choose a position for childbirth.

• support the woman's intake of food and liquids at her request.

Analgesia for childbirth with the consent of the woman

Helping the woman in labor to overcome pain during childbirth is the task of medical professionals and the attending partner. Pain reduction can be achieved by using simple non-pharmacological methods of pain relief: - maximum psychological support and reassurance;

- change in body position (Figure 1): encouraging the parturient to active movements; offer the partner to massage her back; stroke the lower abdomen; hold her hand and wipe her face with a wet sponge between contractions; offer the woman to follow a special breathing technique (deep inhalation and slow exhalation);

- local pressure on the sacral region: during the seizure, it is necessary to press hard with a fist or wrist on the sacral region. The woman in labor independently determines the place and force with which pressure should be applied. To maintain balance, the other hand of the partner is placed in front on the front upper iliac spine. No pressing is done between takes;

- double compression of the hips: the woman in labor stands on her hands and knees, leaning forward. The partner puts his hands on the gluteal muscles, pressing with his whole palm diagonally to the center of the woman's pelvis for a long time;

- knee pressing: the woman in labor sits flat on a chair with her knees about 10 cm apart, her feet firmly resting on the floor. The partner steps in front of her and places the supporting part of the palm on top of the tibia, pressing the knees towards the hip joints of the woman for a long time, leaning towards her;

- hydrotherapy: taking a shower or immersion in water with a temperature of 36-37°C in the active phase (if possible). The length of stay in the bath or shower depends on the wishes of the woman, but it is necessary to constantly maintain the temperature of the water within the given limits and conduct thermometry in the parturient.

Hydrotherapy must be carried out under the supervision of medical personnel!

- massage: the massage technique consists of light stroking of the abdomen, vibration and kneading of the hands, feet and cellular zone, strong circular movements, prolonged pressure on various points and the area of the Michaelis rhombus.

Requirements related to drug analgesia: pain-relieving effect, absence of negative effects on the body of the mother and fetus, simplicity and accessibility for all maternity facilities.

Observation and assistance in the II period of childbirth

Prevention of bacterial and viral infections (including HIV):

• Adequate treatment of the hands of medical staff (hygienic or antiseptic, depending on the planned manipulation) according to current algorithms.

• Use of sterile gloves during internal obstetric examination, delivery and operative interventions (episiotomy, etc.).

• Use of a clean gown by medical personnel for childbirth. If possible, it is optimal to use a disposable gown made of water-repellent material.

• Use of means to protect the face of medical personnel: a mask (preferably disposable), glasses or a shield.

• Careful use of sharp instruments.

Evaluation of the condition of the fetus

Monitor fetal heart activity by auscultation every 5 minutes in the early phase of the second period, and after each effort in the active phase.

Assessment of the general state of labor

Measurement of blood pressure, heart rate - every 15 minutes.

Assessment of labor progress

The progress of the head through the birth canal and labor activity (frequency and duration of uterine contractions) are evaluated.

Obstetrical tactics should correspond to the phase of the second period of labor.

The early phase of the second period of labor

The early phase of the second period of labor begins with the full opening of the cervix and continues until the appearance of spontaneous active efforts (or until the head descends to the pelvic floor).

In the early phase, mobility of the woman in labor should be ensured, namely: encourage her to be active and walk freely. The woman's vertical position and the ability to move freely contribute to the preservation of active labor and advancement of the fetal head.

In the early phase, the woman in labor should not be forced to strain, because this leads to labor fatigue, disruption of the process of internal rotation of the fetal head, injury to the birth canal and head, fetal condition disorders and unnecessary medical intervention.

The late (powerful) phase of the second period of childbirth

The late (powerful) phase of the second period of labor begins from the moment the head descends to the pelvic floor and there are spontaneous active efforts.

Preference should be given to the technique of "unregulated physiological efforts", when a woman independently makes several short spontaneous powerful efforts without holding her breath.

The permissible duration of the second period of childbirth:

• for a woman giving birth for the first time, up to 2 hours;

• in a woman giving birth again, up to 1 hour.

Position of a woman for childbirth

It is ensured that the woman in labor can choose a position for giving birth that is convenient for her.

The routine position on the back ("lithotomy" position) is accompanied by an increase in the frequency of cases of fetal abnormalities and associated operative interventions in comparison with vertical positions (sitting, standing), as well as the position of the parturition on the side. [A]

Episiotomy is not used during normal childbirth

Indications for episiotomy:

• complicated vaginal births (with pelvic presentation, dystocia of the shoulders, with the application of obstetric forceps, vacuum extraction);

• fetal distress;

• cicatricial changes in the perineum, which is a significant barrier to childbirth.

Episiotomy and episiorrhaphy are performed under anesthesia

After the birth of the head, it is necessary to allow the shoulders to turn independently, while checking whether the umbilical cord is wrapped around the neck. In the case of a tight entanglement, the umbilical cord must be crossed between 2 clamps, if it is not tight, loosen the tension of the umbilical cord and wait for the next effort. Don't hurry!

If the fetus is in good condition, you should not try to deliver the shoulders during the same effort during which the head was born. Shoulders can be born during the next effort.

Immediately after birth, the midwife dries the baby's head and body with a preheated sterile diaper, lays the baby on the mother's stomach, puts on the baby a clean cap and socks, covers it with a dry, clean diaper and a blanket.

At the same time, a pediatrician-neonatologist, and in his absence, an obstetrician-gynecologist, performs an initial assessment of the newborn's condition.

Routine bladder catheterization is not recommended [A]

Management of the III period of childbirth

There are two tactics for managing the third period of labor - active and expectant.

Active management of the third period of childbirth

The use of the technique of active management of the third period during childbirth allows to reduce the frequency of postpartum bleeding caused by uterine atony by 60%, as well as to reduce the amount of postpartum blood loss and the need for hemotransfusion.

Active management of the third stage of labor should be offered to every woman during vaginal delivery.

The woman in labor must be informed about the active management of the III stage of childbirth, and must give voluntary written consent to its implementation

Standard components of active management of the third stage of labor include:

• introduction of uterotonics;

• litter birth by controlled traction on the umbilical cord with simultaneous contraction of the uterus;

• massage of the uterus through the front abdominal wall after the birth of the litter.

Absence of one of the components excludes active management of the III period of childbirth

Step 1

Introduction of uterotonics:

Within the first minute after the birth of the child, palpate the uterus to rule out the presence of a second fetus in it, if it is not, inject 10 units of oxytocin intramuscularly. If there is no oxytocin, you can use ergometrine - 0.2 mg intramuscularly.

Do not use ergometrine for women with hypertensive disorders!

The woman should be informed about the possible side effects of these drugs.

In the absence of uterotonics, the method of active management of the third period of labor should not be used. In this case, expectant tactics of managing the third period of labor should be used.

Birth of the litter by controlled traction on the umbilical cord:

Step 2

• pinch the umbilical cord closer to the perineum with a clamp, hold the pinched umbilical cord and the clamp in one hand;

Step 3

• put the other hand directly above the woman's pubis and hold the uterus, pulling it away from the womb;

• keep the umbilical cord in a state of slight tension and wait for the first strong contraction of the uterus (usually 2-3 minutes after the administration of oxytocin).

Do not pull on the umbilical cord until the uterus begins to contract, just keep the umbilical cord in a state of slight tension

Step 4

• simultaneously with the strong contraction of the uterus, offer the woman to strengthen herself and very carefully pull (traction) the umbilical cord downwards so that the birth of the placenta occurs;

• during traction, continue to perform countertraction with the other hand in the opposite direction of traction (that is, push the uterus away from the womb);

• if the placenta does not descend within 30-40 seconds. controlled traction, stop the traction on the umbilical cord, but continue to carefully hold it in a state of light tension, the other hand remains above the womb, holding the uterus;

• simultaneously with the next strong contraction of the uterus, repeat the traction.

Never perform traction (pulling) on the umbilical cord without using countertraction (abduction) of a well-contracted uterus above the womb!

Traction of the umbilical cord without contraction of the uterus may result in inversion of the uterus

Step 5

• after the birth of the placenta, hold it with two hands and carefully turn it to twist the membranes, slowly pull the placenta down; in case of rupture of membranes, carefully examine the vagina and cervix with sterile gloves and remove their remains;

• carefully examine the placenta and make sure of its integrity. If part of the maternal surface is missing, or there is a section of torn membranes with vessels, this requires appropriate measures;

• in the absence of placental birth within 30 minutes after the birth of the fetus under adequate anesthesia. carry out manual separation of the placenta and selection of litter.

In the event of bleeding, manual separation of the placenta and separation of the litter should be carried out immediately under adequate anesthesia.

Step 6

Massage of the uterus

• After the birth of the litter, the uterus is immediately massaged through the anterior abdominal wall of the woman until it becomes tight.

In the future, the uterus is palpated every 15 minutes. during the first 2 hours to be sure that the uterus does not relax, but remains tight.

A bubble with ice on the lower abdomen in the early postpartum period is not used [A].

Expectant management of the third period of labor.

After the pulsation of the umbilical cord ends, the midwife clamps and cuts the umbilical cord. Careful monitoring of the general condition of the woman in labor, signs of placental separation, and the amount of bleeding are carried out.

When signs of placental separation appear (Schroeder's, Alfeld's, Klein's, Küstner-Chukalov's signs), the woman is offered to "exercise", which will lead to the birth of the litter.

If there are no signs of separation of the placenta within 30 minutes after the birth of the fetus, manual separation of the placenta and separation of the litter are carried out.

In the event of bleeding, manual separation of the placenta and removal of litter is carried out immediately under adequate anesthesia.

Examination of the lower parts of the birth canal is carefully carried out with the help of tampons after childbirth. Indications for vaginal speculum examination are the presence of bleeding, operative vaginal delivery, rapid delivery, or delivery outside the hospital.

List of recommended literature:

Main:
1. Anesthesiology, intensive care and intensive care: a study guide (University I-III of the Russian Academy of Sciences) / A.A. Ilko - 2nd ed., revised. and add., "Medicine", Kyiv, 2018
2. 30 Emergency conditions in therapy: a study guide: edited by Prof. Yu.M. Mostovoy Vinnytsia, 2017

Additional:
1. Order of the Ministry of Health of Ukraine dated June 5, 2019 No. 1269 "Emergency medical care: new clinical protocol"
2. Anesthesiology, intensive care and emergency conditions: textbook: edited by Prof. Vladyki A.S. Odesa: ONMedU, 2016

Electronic information resources:
1. http://moz.gov.ua - Ministry of Health of Ukraine
2. https://www.cprguidelines.eu/ - European Resuscitation Council
3. https://www.c-tecc.org/our-work/guidance - Committee on Tactical Emergency Relief
4. https://zakon.rada.gov.ua/laws/show/z0356-22#n42 - Order of the Ministry of Health of Ukraine No. 441 dated 09.03.2022 "On approval of procedures for providing pre-medical assistance to persons in emergency situations"

8. Materials for self-control.

8.1. Questions for self-control.

1. Harbingers of childbirth: the preliminary period.

2. Determination of the degree of maturity of the cervix. Bishop scale.

3. Biomechanism of childbirth in anterior and posterior types of occipital presentation.

4. Reasons for the onset of childbirth. Regulation of labor activity. Methods of registration of maternity activity. Monitoring during childbirth.

5. Childbirth periods. Their duration in first and second births.

6. The period of opening of the cervix during childbirth. Clinic, management. Partogram.

7. The period of expulsion of the fetus. Clinic, management.

8. Consecutive period. Signs of placental abruption. Clinic, follow-up period management (active management, expectant management tactics).

9. Conservative methods of excrement.

10. Determination of litter integrity. Concept of physiological and pathological blood loss.

11. Assessment of the newborn according to the Apgar scale.

12. The primary toilet of a newborn. Compliance with the thermal chain.

13. Psychoprophylactic analgesia for childbirth. Medicinal analgesia for childbirth.

8.2. Test tasks for self-control.

1. In what size of the plane of the entrance to the small pelvis is the sagittal seam in the front view of the occipital presentation, I position after performing head flexion?

A. Straight.

B. Left oblique or straight.

C. Right oblique or straight.

D. Right oblique or transverse.

E. Left oblique or transverse.

2. In what size of the plane of the entrance to the small pelvis is the arrow-shaped seam in the rear view of the occipital presentation, I position after performing head flexion?

A. Straight.

B. Left oblique or straight.

C. Right oblique or straight.

D. Right oblique or transverse.

E. Left oblique or transverse.

3. In what plane of the small pelvis does the internal rotation of the fetal head end in the front view of the occipital presentation, II position?

A. Entrance to the small pelvis.

B. Wide part of the pelvic cavity.

C. Narrow part of the pelvic cavity.

D. When transitioning from the wide to the narrow part of the pelvic cavity.

E. Exit from the small pelvis.

4. In what size of the exit plane from the small pelvis is the sagittal seam when the head is extended in the rear view of the occipital presentation, I position?

A. Straight.

B. Left oblique or straight.

C. Right oblique or straight.

D. Right oblique or transverse.

E. Left oblique or transverse.

5. In what size of the exit plane from the small pelvis is the shoulder girdle of the fetus cut through and born in the front view of the occipital presentation?

A. Straight.

B. Right oblique.

C. Left oblique.

D. Transverse.

E. Direct and transverse.

6. On the occipital region of the baby's head, which has a dolichocephalic shape, a birth tumor with a center in the region of the small occipital lobe is determined. In what presentation of the fetal head did the birth take place?

A. With fronto-parietal.

B. In the front view of the occiput.

C. In the posterior view of the occiput.

D. When facial.

E. At frontal.

7. The 20-year-old primiparous woman is at the beginning of the first period of physiological childbirth. Take over for 15-20 seconds, after 10-15 minutes, of weak strength. The heartbeat of the fetus does not suffer.

At what opening of the uterine cavity in cm will the outpouring of amniotic fluid be timely?

A. 6-8.

B. 8-10.

C. 4-6.

D. 2-4.

E. 1.5-2.

8. During the internal obstetric examination of a woman giving birth for the second time, the opening of the uterine cavity is 4-5 cm, when the finger is pressed upwards, the fetal head is pushed back and returns to its original position again, the pelvis is free.

Permissible length of stay of the fetal head in this plane, an hour?

A. 5.

B. 6.

C. 4.

D. 3.

E. 2.

9. You observe a woman in labor in the 1st stage of labor. During the internal obstetric examination, the arrow-shaped suture is in the right oblique dimension, the small crown is closer to the pubic symphysis. How should a woman in labor lie in bed so that the insertion of the fetal head is correct?

A. On the left side.

B. On the back.

C. On the right side.

D. Doesn't matter.

E. Only walking is allowed.

10. A woman giving birth for the second time, weighing 80 kg. Specify the permissible blood loss, ml:

A. 400.

V. 500.

P. 600.

D. 700.

E. 800.

Correct answers: 1 D, 2E, 3E, 4A, 5A, 6B, 7B, 8B, 9A, 10A