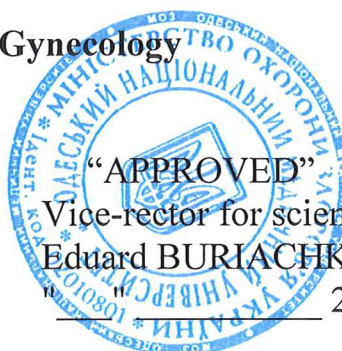


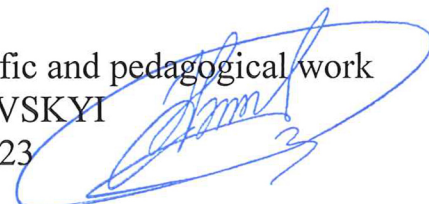
**MINISTRY OF HEALTH OF UKRAINE
ODESA NATIONAL MEDICAL UNIVERSITY**

**Faculty of dentistry
Department of Obstetrics and Gynecology**



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" " 2023



METHODICAL DEVELOPMENT OF THE PRACTICAL LESSON

Course IV. Faculty of dentistry

Educational discipline "Obstetrics and gynecology"

Practical lesson No. 2. Topic: " Physiology of labor and the postpartum period".

Approved:

Meeting of the Department of Obstetrics and Gynecology
Odessa National Medical University

Protocol No. 1 dated "28" August 2023.

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Practical lesson No.2

Topic: "Physiology of labor and the postpartum period".

Aim: Knowledge of the physiology of childbirth begins clinical obstetrics. Careful containment, and, if necessary, the most approximate inheritance of physiological processes during childbirth is a direct and natural way to reduce maternal and perinatal morbidity and mortality. The study of the main stages of the course and management of physiological childbirth allows you to master in practice the most important methods of examining women in labor, the ability to assess the obstetric situation, and the provision of appropriate assistance in physiological childbirth, taking into account the data, based on the principles of evidence-based medicine. An important component of this lesson is the study of the doctor's tactics in the management of childbirth at all stages, elimination of birth traumatism, prevention of fetal distress and newborn asphyxia. Also students should gain basic knowledge about physiological changes in postpartum period, physiology of lactation and breastfeeding, primary care of newborn in order to make recommendations for management of puerperium and neonatal period and advice woman on discharge.

Basic concepts: To acquaint with the demographic indicators of fertility in different regions of Ukraine. Have an idea of modern perinatal technologies. To master the signs and concepts of childbirth, the main options for the use of pain relief during childbirth, and at what rates they are used. Retrogressive changes in reproductive system and general physiological changes in female body. Course and management of the postpartum period. Physiology of lactation. Breastfeeding. Postpartum contraception: the method of lactation amenorrhea (MLA). Physical features of the newborn. Newborn care. Advantages of cohabitation of mother and child.

Equipment: Professional algorithms, structural and logical schemes, tables, models, video materials, results of laboratory and instrumental studies, situational problems, patients, case histories.

1. Organizational measures (greetings, verification of those present, announcement of the topic, purpose of the lesson, motivation of higher education seekers to study the topic).

Applicants of higher education must treat a pregnant woman with responsibility and consistency in work, sensitivity and tolerance. Teach the rules of professional examination, external obstetric examination, auscultation of fetal heartbeat. Monitoring of the general internal obstetric examination (on a phantom), determination of the onset of labor. Determine the degree of maturity of the cervix according to the Bishop scale. Determine the beginning of the first period of labor,

objectively assess the nature of labor (dynamics of the opening of the cervix, frequency, strength and duration of contractions), determine and evaluate the heartbeat of the fetus (by auscultation, CTG); provide assistance during childbirth and provide psychophysiological analgesia for childbirth. Demonstrate the tactics of managing the III period of labor (on a phantom). Be able to assess the integrity of placenta; determine the total blood loss during childbirth; evaluate the condition of the newborn according to the Apgar scale.

To teach the student responsibility and consistency in work, sensitivity and tolerant attitude towards a pregnant woman.

To teach the student logical clinical thinking and diagnostic methods new to him.

2. Control of the reference level of knowledge (written work, written test, online test, face-to-face surveys, etc.).

- Requirements for the theoretical readiness of students of higher education to perform practical classes.

Knowledge requirements:

- the ability to collect medical information about the patient and analyze clinical data;
- the ability to interpret the results of laboratory and instrumental achievements;
- ability to diagnose: determine preliminary, clinical, final, accompanying diagnosis, emergency conditions;
- the ability to perform medical and dental manipulations;
- ability to determine tactics, methods and provision of emergency medical assistance;
- the ability to provide pre-medical care according to the protocols of tactical medicine.

List of didactic units:

- have an understanding of what the term Physiological labor means;
- have an understanding of what the term physiological postpartum period means;
- determine the amount of necessary laboratory research and specialist consultations;
- collect anamnesis, conduct a general examination and obstetric examination of the pregnant woman.

Questions (tests, tasks, clinical situations) to check the basic level of knowledge on the subject of the lesson.

Questions:

Define the concept of " Harbingers of labor" and "preliminary period".

- What are the different birth periods?
- What are the features of the mechanism of opening the cervix in prima – and multipara women?
 - What are the phases in the first period of labor?
 - What are the features of the II stage of labor?
 - How is the degree of opening of the cervix determined?
 - What are the indications for an internal obstetric examination?
 - What objective information must be obtained during a vaginal examination in the first period of labor?
 - How is premature, early, timely and late discharge of amniotic fluid determined?
 - What characterizes the II period of labor, its maximum permissible duration?
 - What are the features of the II stage of labor
 - What characterizes the III period of labor, its duration?
 - What does the Apgar score mean for a newborn?
 - What criteria does the thermal chain include?

Situational test tasks:

1. A 32-year-old pregnant woman was hospitalized in the maternity ward at 37-38 weeks of gestation with complaints of contractions in the lower abdomen that started 4 h ago, water was broken 2 h ago. According to the anamnesis, the first pregnancy, 10 years ago, ended with the birth of a large fetus (weight 4200 g). The condition of the woman is satisfactory. Body weight 72 kg, height 160 cm, blood pressure 115/60 mm Hg on both hands. The dimensions of the pelvis are 26-28-30-21. The position of the fetus is longitudinal, the head is in the pelvic cavity. Contractions after 2-3 minutes for 40-45 seconds, the fetal heartbeat is clear, rhythmic up to 140 bpm.

Internal obstetric examination: full opening of the cervix. The fetal head is on the pelvic floor. Sagittal suture is in direct size. A small fontanel under the pubic symphysis.

Question:

1. Establish the diagnosis.
2. What are the patient management tactics?
3. Specify the biomechanism of labor in the occipital anterior presentation

Answer:

Diagnosis: Pregnancy II, 37-38 weeks. The position of the fetus is longitudinal lie, head presentation.

2. The tactics of the patient's management are physiological, without any intervention.

3. Biomechanism of labor in the occipital anterior presentation.

The first moment is flexion of the head and descending it into the plane of the entrance to the small pelvis.

The second point is the internal rotation of the head; it is carried out during its transition from the wide to the narrow part of the pelvis.

The third point is the extension of the head in the exit plane. The sagittal suture coincides with the direct size of the pelvic outlet. The fixation point is formed between the middle of the lower edge of the pubic arch and the suboccipital fossa.

The fourth moment is the internal rotation of the shoulders and the external rotation of the head.

2. Pregnant, with a gestation period of 38 weeks, is in the obstetrics department for 10 hours. The position of the fetus is longitudinal, occipital anterior left (1 position) presentation. The amniotic sac was broken 5 hours ago, after which labor activity weakened. Contractions are short, after 5 minutes, the fetal head does not descend. Medical history: 4 pregnancies, the previous 3 deliveries were uncomplicated. Objectively: pulse 80 beats per minute, blood pressure 120/70 mm Hg. The dimensions of the pelvis: 26-28-30-21 cm. Abdomen circumference - 104 cm, SFH - 37 cm. The heartbeat of the fetus is 120 beats per minute, clear. During the internal obstetric examination: the opening of the uterine cavity is complete, the amniotic sac is absent, the fetal head is in the plane of the exit from the pelvis, the sagittal suture is straight, the small fontanel is under the pubis.

Question:

1. Establish the diagnosis.
2. What are the patient management tactics?
3. Specify the steps of the thermal chain.

Answer:

1. Diagnosis: Pregnancy IV, 38 weeks. Longitudinal lie, occipital anterior presentation, I position. Labor IV. In term, second period of labor, secondary uterine inertia.

2. Physiological labor.

Ten steps of the thermal chain:

- 1) Warm delivery room (operating room).

- 2) Immediate drying of the child
- 3) Skin-to-skin contact
- 4) Breastfeeding.
- 5) Postpone weighing and bathing.
- 6) Properly dress and wrap the child.
- 7) Round-the-clock cohabitation of mother and child.
- 8) Transportation in warm conditions.
- 9) Resuscitation in warm conditions.
- 10) Increasing the level of training and knowledge

Typical test tasks:

1. One of the planes of the pelvis is bounded behind by the sacral promontory, in front by the crests of the iliac bones and the upper edge of the pubic joint, and laterally by the lin. terminalis. What moment of the biomechanism of labor does the fetus in this plane of the small pelvis?

- A. Does not do any of the points.
- B. External rotation of the head and internal rotation of the shoulders.
- C. Extension of the head.
- D. Flexion of the head.

2. The baby's head has a dolichocephalic shape, elongated from front to back. On the occipital region, a birth tumor is determined, located in the middle of the distance between the large and small fontanel. In which presentation of the fetal head did the described birth take place?

- A. Forehead
- B. Occipital anterior presentation.
- C. Face presentation.
- D. Occipital posterior presentation.

3. A woman giving birth for the second time is in labor for 8 hours. Clear amniotic fluid spilled out. The position of the fetus is longitudinal, the head of the fetus above the entrance to the pelvis is not determined. The fetal heartbeat is clear, rhythmic, 140 per minute, over the pubic symphysis. Internal obstetric examination: the cervix is smoothed, the opening is complete, the fetal bladder is absent. The sacral cavity is completely filled with the head. Ischial spines are not defined.

Sagittal suture in the direct size of the pelvis. A large fontanel near the pubic symphysis. Woman is pushing. What period of labor is described?

- A. I period.
- B. The end of the first period.
- S. The beginning of the second period of labor.
- D. The end of the second period of labor.

4. The primipara gave a birth to a live boy weighing 3,200 g and 50 cm long. The umbilical cord was cut after the pulsation of the vessels stopped. When pressing with the edge of the palm above the pubic symphysis, the umbilical cord is pulled into the vagina. Is the sign used to determine separation of the placenta?

- A. Alfeld.
- V. Küstner-Chukalov.
- S. Schroeder.
- D. Dovzhenko.

Correct answers: 1-D; 2-D; 3-C; 4-B.

3. Formation of professional abilities and skills (mastery of skills, conducting curation, determining the treatment scheme, conducting laboratory research).

- Content of the task (assignment, clinical situations, etc.)

Interactive task

Students of higher education in the group are divided into 3 subgroups of 4-5 people each. We work in classes with fantomes and pregnant patients, we give tasks:

Subgroup I - perform external pelviometry.

Subgroup II - measure the Solovyov index, the Michaelis rhombus.

Subgroup III - to estimate the size of the pelvis, to establish the size of the true conjugate.

Non-typical situational tasks

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

- A. Direct
- B. Left oblique or direct.
- C. Right oblique or direct.

D. Right oblique or transverse.

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

- A. Entrance to the small pelvis.
- B. Wide part of the pelvic cavity.
- C. A narrow part of the pelvic cavity.
- D. Exit from the pelvis.

3 In what size of the plane of exit from the pelvis is the shoulders of the fetus pass through and born in the occipital anterior presentation?

- A. Direct
- B. Right oblique.
- C. Left oblique.
- D. Transverse.

4. 20 years old primapara is at the beginning of the first period of physiological labor. Contractions last 15-20 seconds every 10-15 minutes, weak. The heartbeat of the fetus is normal. At what opening of the cervix (indicate in cm) did the amniotic fluid broke, which will be timely?

- A. 6-8.
- B. 8-10.
- C. 4-6.
- D. 2-4.

5. A woman gives birth for the second time, weighing 80 kg. Specify the allowable blood loss in ml:

- A. 400.
- B. 500.
- C. 600.
- D. 700.

Correct answers: 1-D, 2-D, 3-A, 4-B, 5-A

Recommendations (instructions) for the performance of tasks (professional algorithms, reference maps for the formation of practical skills and abilities, etc.)

Methods of examination of women in labor

Algorithm for assessing the degree of cervical dilatation.

External methods to assess the degree of cervical dilatation is possible only approximately. Roughly the degree of cervical dilatation in labor is judged by the height of the contraction ring (the border between the empty muscle, which is contracting, and the lower segment of the uterus, which is stretched). During childbirth, the cervix is usually opened as much as the contraction ring of the transverse fingers is located above the pubic arch.

Internal method for assessing the degree of dilatation of the cervix.

In order to determine the dynamics of cervical dilatation and the location of the fetal head during childbirth, an internal obstetric study is carried out, which is performed when a woman enters the maternity ward, every 4:00 during the first stage of labor and after the discharge of amniotic fluid (for the timely diagnosis of possible loss with the flow amniotic fluid of the umbilical cord and small parts of the fetus).

Due to the increased risk of ascending infection of the birth canal, additional internal obstetric studies in the first stage of labor are permissible only according to indications: abnormal heart rate of the fetus to find out the reasons for the violation of its condition (for example, prolapse of the umbilical cord) and resolve the issue of the method of delivery (cesarean section, Vacuum- extraction, obstetric forceps) in case of multiple pregnancy, after the birth of the first fetus, incorrect position of the fetus, or suspicion of insertion of the fetal head at the entrance to the small pelvis in a state of extension; delay in labor progress due to ineffective uterine contractions (for amniotomy and before oxytocin stimulation) the need for prompt vaginal delivery; bleeding after 22 weeks of pregnancy (in the operating room).

The degree of lowering of the fetal head can also be determined by external and internal methods.

Determination of the degree of lowering of the head by external methods.

The degree of lowering of the head relative to the plane of the entrance to the small pelvis can be determined using the IV Leopold's technique.

The recommended method of abdominal palpation, which determines the height of the fetal head by the number of diameters of the fingers above the symphysis:

5/5 - the fetal head is located above the symphysis, 5 fingers wide, the fetal head is located above the entrance to the small pelvis;

4/5 - the width of 4 fingers, the head is pressed against the entrance to the small pelvis;

3/5 - the width of 3 fingers, the head is a small segment at the entrance to the small pelvis;

2/5 - the width of 2 fingers, the head is a large segment at the entrance to the small pelvis;

1/5 - 0/5 - the width of 1 finger or the head is not determined, the head is in the pelvic cavity.

External palpation of the head should be performed immediately prior to internal obstetric examination. This makes it possible to avoid errors in determining the position of the head in the event of the formation of a large edema of the presenting part of the fetal head.

Determination of the degree of lowering of the head by the method of internal obstetric examination.

- The head is above the entrance to the small pelvis. The pelvis is free, the head is high, it does not interfere with palpation of the nameless line of the pelvis, cape; the sagittal suture is in the transverse dimension at the same distance from the symphysis and the cape, the large and small crown are at the same level.

- The head is a small segment at the entrance to the pelvis. The sacral cavity is free, you can approach the promontory with a bent finger (if reachable). The inner surface of the symphysis is accessible for research, the small fontanel is lower than the large one. The sagittal suture is slightly oblique.

- The head is a large segment at the entrance to the pelvis. The head occupies the upper third of the symphysis and sacrum. The promontory is inaccessible, the gluteal spines are palpable easily. The head is bent, the small fontanel is lower than the large one, the sagittal suture is in one of the oblique dimensions.

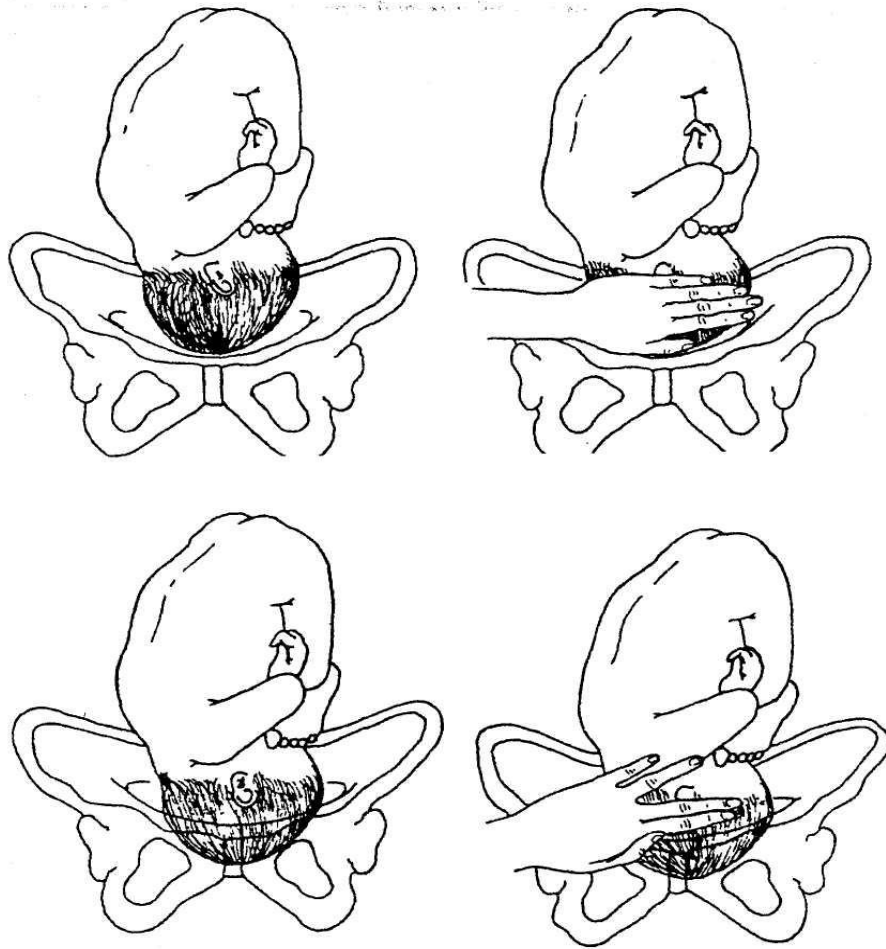
- The head is in the wide part of the small pelvis. The head itself passed in a circle the plane of the wide part of the small pelvis. Two-thirds of the inner surface of the pubic articulation and the upper half of the sacral cavity are occupied by the head. IV and V sacral vertebrae and gluteal spines are freely palpable. The sagittal suture is located in one of the oblique sizes, the small fontanel is lower than the large one.

- The head is in the narrow part of the small pelvis. The upper two thirds of the sacral cavity and the entire inner surface of the pubic articulation are occupied by the head. The gluteal spines are difficult to reach. The head is close to the bottom of the pelvis, its internal rotation is not yet complete, the sagittal suture is in one of the oblique dimensions, close to the straight one. The small fontanelle at the bosom is lower than the large one.

- The head is at the outlet of the pelvis. The sacral cavity is completely filled with the head, the gluteal spines are not defined, the sagittal suture is located in the straight size of the exit from the small pelvis. The small fontanelle at the bosom is lower than the large one.

The position of the fetal head during internal examination can also be found in relation to the level of the gluteal spines - *linia interspinalis* (position "0"). The distance from the gluteal spines to the plane of the entrance to the small pelvis is the same as from the spines to the plane of the exit from the pelvis. The "-" sign means that the head is above the gluteal spines (closer to the entrance to the small pelvis). The "+" sign means that

Stations of the fetal head



There are 3 grades of cervical state: immature, not fully mature and mature cervix. Bishop Scoring System

Factor		Points		
		0	1	2
1.	Position of cervix	Directed toward the symphysis	Middle	The pelvic axis
2.	Length of cervix (cm)	> 2 cm	1-2 cm	< 1 cm
3.	Consistency of cervix	Dense	Moderate	Soft
4.	Cervical dilatation (cm)	close	1-2	> 2

5.	Station of presenting part	above the pelvic inlet plane	Between the superior and posterior margin of the symphysis	posterior margin of the symphysis and below.
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0-2 points – «immature» cervix;

3-5 points – «not fully mature» cervix;

> 6 points – «mature» cervix.

Cervical Examination

The level - or station - of the presenting fetal part in the birth canal is described in relationship to the ischial spines, which are halfway between the pelvic inlet and the pelvic outlet. When the lowermost portion of the presenting fetal part is at the level of the spines, it is designated as being at zero (0) station. In the past, the long axis of the birth canal above and below the ischial spines was arbitrarily divided into thirds by some and into fifths (approximately 1 cm) by other groups. Adopted the classification of station that divides the pelvis above and below the spines into fifths. Each fifth represents a centimeter above or below the spines. Thus, as the presenting fetal part descends from the inlet toward the ischial spines, the designation is -5, -4, -3, -2, -1, then 0 station. Below the spines, as the presenting fetal part descends, it passes +1, +2, +3, +4, and +5 stations to delivery. Station +5 cm corresponds to the fetal head being visible at the introitus.

If the leading part of the fetal head is at 0 station or below, most often the fetal head has engaged - thus, the biparietal plane has passed through the pelvic inlet. If the head is unusually molded or if there is an extensive caput formation or both, engagement might not have taken place although the head appears to be at 0 station (linea interspinalis).

- mark "-" head is above the linea interspinalis (near the pelvic plane of inlet).
- mark "+" the fetal head is below the linea interspinalis (near the pelvic outlet).

Position of the fetal head in the pelvic plane:

-3 - head of the fetus above the inlet;

-2 - head of the fetus pressed to the inlet;

-1 - head of the fetus by the minor segment in the inlet;

-0 - head of the fetus by the major segment in the inlet;

+1 - head of the fetus in the wide part of the small pelvis;

+2 - head of the fetus in the narrow part of the small pelvis;

+3 - head of the fetus in the pelvic outlet

MANAGEMENT:

A vaginal examination is performed 4 hours after the initial one or earlier if clinically warranted. If subsequent examination shows dilatation between Alert line and Action line a repeat vaginal examination is carried out in 2 hours. At this examination if the cervical dilatation is touching / crossing the Action line, the Labour and Birth Suite medical team must evaluate the woman's progress in labour and instigate appropriate intervention.

Auscultation of the fetal heart tones is performed after 20 weeks of pregnancy with the help of obstetrical stethoscope, where the frequency of heart beats in one minute is determined.

- physiological normal - 110-170 bpm
- frequency of heart beats above 180 bpm and less than 100 bpm testifies of disorders in the fetal condition.

For auscultation of fetal heart beat use the following rules:

- for facial presentation – listen for the heart beat below the navel on the side where the fetal thorax is located (if first position - on the right side, if second - on the left side).
- for transverse lie - near the navel, closer to the fetal head.
- for breech presentation - above the navel, near the fetal head on the side where the back is turned.

Cardiotocography (CTG) - synchronous electronic monitoring of the fetal heart rate and uterine contractions for 10-15 minutes.

- during analysis of the CTG, such parameters are evaluated: basal frequency of heart rate (BFHR), variability of the heart rate (amplitude and frequency oscillation), presence and type of changes in BFHR in the form of acceleration or decelerations of heart rate.
- if any pathological parameters of heart rate are present, which testify of a dangerous fetal condition, continuous monitoring with the CTG during labour is recommended

- diagnostic criteria: during normal fetal condition for CTG it is characteristic: BFHR is between 110-170 b.p.m (normocardia), variability (width of the tape) - 10-25 bpm with frequency of oscillation 3-6 cycles per minute (wavy type), presence of accelerations and absence of decelerations.

Possible rupture of membranes. In 10% of pregnancies, rupture of the membranes precedes the onset of labour. This presents as fluid leaking through the cervix and out of the vagina. The differential diagnosis includes urine leakage, vaginal infections, and passage of cervical mucus. Because prolonged rupture of the membranes is associated with higher rates of maternal and neonatal infection, optimal treatment of ruptured membranes at term is prompt induction of labour.

Monitoring the condition of women:

- heart rate and blood pressure (every 2 hours)
- temperature (every 4 hours)
- urine: volume; presence of protein or acetone - for displays (every 4 hours).

Management of the second stage of labour:

- measurement blood pressure, heart rate in women during labour every 10 minutes;
- monitoring of fetal palpitation every 5 minutes during the early phase;
- control by promoting fetal head through the birth canal;
- perform amniotomy if there is no timely rupture of membrane.

Physiologic position and movement.

Management of the third stage of labour

Two tactics for conducting the third period of delivery exist: ***active and conservative.***

Immediately following delivery of the baby, the uterus begins the process of involution. Uterine contractions cause shearing of the placenta away from the uterine wall, and the placenta generally delivers shortly after the baby. Signs of spontaneous placental separation include an apparent lengthening of the umbilical cord, a gush of vaginal bleeding, and a change in shape of the uterus from discoid to globular.

Active management of the third stage of labour has been shown to be of benefit in reducing postpartum blood loss and may include draining the placenta of blood, controlled cord traction, or administration of oxytocic agents. If cord traction is employed, suprapubic pressure with the abdominal hand will lessen the potential for uterine inversion and catastrophic hemorrhage and shock. If the placenta has not delivered within 30 minutes of childbirth, or in the case of severe hemorrhage, the placenta should be manually removed.

The placenta should always be carefully inspected for abnormalities of cord insertion, confirmation of a three-vessel cord, and completeness of removal of the placenta and membranes. If any portion of the placenta or the membranes is missing, the uterine cavity should be manually explored. The uterus should be frequently palpated following delivery of the placenta to ensure that it remains well contracted. Oxytocin, administered as a dilute intravenous solution or given 10 to 20 U intramuscularly, decreases the incidence of postpartum hemorrhage due to uterine atony. The birth canal, including the cervix, vagina, and perineum, should be inspected for lacerations requiring repair. Under most circumstances, the baby can remain with the mother or immediate family and attempts at breast-feeding within the first 10 to 20 minutes should be encouraged. This first suckling stimulates endogenous oxytocin release and begins the process of milk production and successful breast-feeding.

Episiotomy is an incision in the perineum made to facilitate vaginal delivery. There is no role for routine episiotomy in modern obstetric practice, although there are some clinical indications for its use. In general, episiotomy is used to shorten the second stage of labour for fetal indications (terminal bradycardia or shoulder dystocia) or to control perineal damage when the risk of significant spontaneous laceration is high (operative vaginal delivery, previous large laceration, small perineal body, or large infant). Episiotomy should be performed with adequate local or regional anesthesia and with the verbal consent of the patient, when possible. There are two types of episiotomy techniques in common use: median and mediolateral.

Active conduction of the third stage

Because of a number of advantages, active conduction of the third stage of labour is the most widespread tactic and approved by the World Health Organization, International Federation of Obstetricians-Gynecologists and the International Confederation of Obstetricians.

The use of active conduction of the third stage during each labour lowers the frequency of postnatal bleeding 60% of the time caused by atonia of the uterus, and it also reduces the amount of postnatal blood loss and need for haemotransfusion.

Standard components for active conduction of the third stage include:

- introduction of uterotonics:
- birth of the placenta by controlled traction of the umbilical cord while holding the fundus of the uterus with the palm of the doctor's hand;

- massage of the uterus through anterior abdominal wall after the birth of the placenta.

Rules for introducing uterotonics: within the first minute after the birth of the child palpate the uterus for the presence of a second child, if there is no other child – introduce 10 units of oxytocin i/m. Oxytocin is the most widespread uterotonic because it takes effect in 2-3 minutes; it can be used for all women.

If oxytocin can not be used, use ergometrin - 0,2 mg i/m. The woman should be informed about the possible side-effects of these preparations.

Ergometrin cannot be used in women with pre-eclampsia, eclampsia and hypertension.

Controlled traction by the umbilical cord:

- clamp the umbilical cord closer to the perineum; hold the clamped umbilical cord and clamp in one hand;
- put the second hand directly over the women's pubis and hold the uterus, pulling away from the symphysis;
- slightly pull the umbilical cord and wait for a strong contraction of the uterus (usually 2-3 minutes after the introduction of oxytocin);
- simultaneously during the strong contraction, the woman should push and very cautiously pull (traction) the umbilical cord downward till the birth of the placenta; simultaneously continue with the second hand contraction in the opposite direction of traction (pushing the uterus away from the symphysis).
- if the placenta does not detach during 30-40 seconds of controlled traction, stop the traction by the umbilical cord, but continue cautiously keeping the cord in light tension; the second hand remains over the pubis, holding the uterus.
- wait for the uterus to contract again and repeat the controlled traction by the umbilical cord with contraction of the uterus.

Never use traction (pulling downwards) by the umbilical cord without contraction of a well contracted uterus over the pubis.

Using traction by the umbilical cord without contraction of the uterus can lead to prolapse or inversion of the uterus.

After the placenta is delivered, hold it with both hands and cautiously turn it, pulling the membranes out. If the membranes tear, cautiously examine the vagina and cervix in sterile gloves. If the membranes are seen, carefully use a clamp to remove it.

Attentively examine the placenta and make certain of its integrity. If an area of the maternal surface is absent, or if there is an area torn with vessels, there is reason to suspect retention of an area of the placenta and begin necessary measures.

Massage of the uterus: after the birth of the placenta immediately massage the uterus through the anterior abdominal wall until the uterus does not become firm.

Further, the uterus should be palpated every 15 minutes for the first 2 hours, to be sure that after the uterus is massaged it does not relax, but remains firm. If necessary repeat the massage.

Ice is not applied on the lower abdomen during the early postnatal period.

Active conduction of the III stage of labour should be offered to each woman as it lowers the frequency of postnatal bleedings resulting from atonia of the uterus. The parturient woman should be informed concerning active conduction of the III stage of labour, and should give voluntary written consent.

Passive conduction of the third stage of labour

The postnatal period of labour is the shortest (5 - 30 min). However, very important because of the possibility of appearing of postnatal bleeding. The postnatal period is accompanied by physiological blood loss (0,5 % of the woman's weight).

The midwife, when the umbilical cord stops pulsating, but no later than one minute after the birth of the child, clamps and cuts the umbilical cord. The general condition of the woman is carefully supervised; signs of placental detachment, amount of blood loss are closely watched.

When signs of placental detachment occur (Schreder's sign, Alfred's, Klein's, Kustner-Chukalov's) - it is necessary to have the woman "push" which leads to the birth of the afterbirth.

If there are no signs of placental detachment or signs of external bleeding 30 minutes after the delivery of the baby, manual detachment and delivery of the afterbirth is performed. If there are signs of bleeding - manual detachment and delivery of the afterbirth should be performed immediately with adequate anesthesia.

After the placenta is delivered, it should be carefully examined (be certain of the integrity of the placenta and membranes).

The general duration of birth on average for primipara is 8-12 hours, for secundipara - 6-8 hours.

The birth canal is examined after the delivery (with the help of vaginal mirrors) only if there is excessive bleeding, after operative vaginal delivery or if the doctor is uncertain about the integrity of the birth canal (fast childbirth, childbirth outside the hospital).

PUERPERIUM is the period following childbirth during which the body tissues, specially the pelvic organs revert back approximately to the prepregnant state both anatomically and physiologically. The retrogressive changes are mostly confined to the reproductive organs with the exception of the mammary glands which in fact show features of activity. Involution is the process whereby the genital organs revert back approximately to the state as they were before pregnancy. The woman is termed as a puerpera.

Puerperium begins as soon as the placenta is expelled and lasts for approximately 6 weeks when the uterus becomes regressed almost to the non-pregnant size. The period is arbitrarily divided into — (a) early – within 24 hours; (b) remote – up to 6 weeks. It is the time from delivery until complete physiological involution and psychological adjustment.

INVOLUTION OF THE UTERUS

Uterus: Immediately following delivery, the uterus becomes firm and retract with alternate hardening and softening. The uterus measures about $20 \times 12 \times 7.5$ cm (length, breadth and thickness) and weighs about 1000 gm. At the end of 6 weeks, its measurement is almost similar to that of the non-pregnant state and weighs about 60 gm. The placental site contracts rapidly presenting a raised surface with measures about 7.5 cm and remains elevated even at 6 weeks when it measures about 1.5 cm.

Lower uterine segment: Immediately following delivery, the lower segment becomes a thin, flabby and collapsed structure. It takes a few weeks to revert back to the normal shape and size of the isthmus, i.e. the part between the body of the uterus and internal os of the cervix.

Cervix: The cervix contracts slowly; the external os admits two fingers for a few days but by the end of first week, narrows down to admit the tip of a finger only. The contour of the cervix takes a longer time to regain (6 weeks) and the external os never reverts back to the nulliparous state.

The physiological process of involution is most marked in the body of the uterus. Changes occur in the following components: (1) Muscles (2) Blood vessels (3) Endometrium.

Muscles: There is marked hypertrophy and hyperplasia of muscle fibers during pregnancy and the individual muscle fiber enlarges to the extent of 10 times in length and 5 times in breadth. During puerperium, the number of muscle fibers is

not decreased but there is substantial reduction of the myometrial cell size. Withdrawal of the steroid hormones, estrogen and progesterone, may lead to increase in the activity of the uterine collagenase and the release of proteolytic enzyme. Autolysis of the protoplasm occurs by the proteolytic enzyme with liberation of peptones which enter the blood stream. The connective tissues also undergo the same type of degeneration. The conditions which favors involution are — (a) efficacy of the enzymatic action and (b) relative anoxia induced by effective contraction and retraction of the uterus.

Blood vessels: The changes of the blood vessels are pronounced at the placental site. The arteries are constricted by contraction of its wall and thickening of the intima followed by thrombosis. During the first week, the arteries undergo thrombosis, hyalinization and fibrinoid end arteritis. The veins are obliterated by thrombosis, hyalinization and endophlebitis. New blood vessels grow inside the thrombi.

Endometrium: Following delivery, the major part of the decidua is cast off with the expulsion of the placenta and the membranes, more at the placental site. The endometrium left behind varies in thickness from 2–5 mm. The superficial part containing the degenerated decidua, blood cells and bits of fetal membranes becomes necrotic and is cast off in the lochia. Regeneration starts by 7th day. It occurs from the epithelium of the uterine gland mouths and interglandular stromal cells. Regeneration of the epithelium is completed by 10th day and the entire endometrium is restored by the day 16, except at the placental site where it takes about 6 weeks.

CLINICAL ASSESSMENT OF INVOLUTION

The rate of involution of the uterus can be assessed clinically by noting the height of the fundus of the uterus in relation to the symphysis pubis. The measurement should be taken carefully at a fixed time every day, preferably by the same observer. Bladder must be emptied before hand and preferably the bowel too, as the full bladder and the loaded bowel may raise the level of the fundus of the uterus. The uterus is to be centralized and with a measuring tape, the fundal height is measured above the symphysis pubis. Following delivery, the fundus lies about 13-14 cm above the symphysis pubis. During the first 24 hours, the level remains constant; thereafter, there is a steady decrease in height by 1,5-2 cm in 24 hours, so that by the end of second week the uterus becomes a pelvic organ. The rate of involution thereafter slows down until by 6 weeks, the uterus becomes almost normal in size.

The involution may be affected adversely and is called subinvolution. Sometimes, the involution may be continued in women who are lactating so that the uterus may be smaller in size — superinvolution. The uterus, however, returns to normal size if the lactation is withheld.

INVOLUTION OF OTHER PELVIC STRUCTURES

Vagina: The distensible vagina, noticed soon after birth takes a long time (4-8 weeks) to involute. It regains its tone but never to the virginal state. The mucosa remains delicate for the first few weeks and submucous venous congestion persists even longer. It is the reason to withhold surgery on puerperal vagina. Rugae partially reappear at third week but never to the same degree as in prepregnant state. The introitus remains permanently larger than the virginal state. Hymen is lacerated and is represented by nodular tags — the carunculae myrtiformes.

Broad ligaments and round ligaments require considerable time to recover from the stretching and laxation.

Pelvic floor and pelvic fascia take a long time to involute from the stretching effect during parturition.

LOCHIA

It is the vaginal discharge for the first fortnight during puerperium. The discharge originates from the uterine body, cervix and vagina.

Odor and reaction: It has got a peculiar offensive fishy smell. Its reaction is alkaline tending to become acid towards the end.

Color: Depending upon the variation of the color of the discharge, it is named as: (1) Lochia rubra (red) 1-4 days. (2) Lochia serosa (5-9 days) — the color is yellowish or pink or pale brownish. (3) Lochia alba — (pale white) — 10-15 days.

Composition: Lochia rubra consists of blood, shreds of fetal membranes and decidua, vernix caseosa, lanugo and meconium. Lochia serosa consists of less RBC but more leukocytes, wound exudate, mucus from the cervix and microorganisms (anaerobic streptococci and staphylococci). The presence of bacteria is not pathognomonic unless associated with clinical signs of sepsis. Lochia alba contains plenty of decidual cells, leukocytes, mucus, cholesterol crystals, fatty and granular epithelial cells and microorganisms.

Amount: The average amount of discharge for the first 5–6 days, is estimated to be 250 mL.

Normal duration: The normal duration may extend up to 3 weeks. The red lochia may persist for longer duration especially in women who get up from the bed for the first time in later period. The discharge may be scanty, especially following premature labors or may be excessive in twin delivery or hydramnios.

Clinical importance: The character of the lochial discharge gives useful information about the abnormal puerperal state.

The vulval pads are to be inspected daily to get information:

- **Odor:** If malodorous, indicates infection. Retained plug or cotton piece inside the vagina should be kept in mind.

- Amount: Scanty or absent — signifies infection or lochiometra. If excessive — indicates infection.
- Color: Persistence of red color beyond the normal limit signifies subinvolution or retained bits of conceptus.
- Duration: Duration of the lochia alba beyond 3 weeks suggests local genital lesion.

LACTATION

For the first two days following delivery, no further anatomic changes in the breasts occur. The secretion from the breasts called colostrum which starts during pregnancy becomes more abundant during the period.

COMPOSITION OF THE COLOSTRUM: It is deep yellow serous fluid, alkaline in reaction. It has got a higher specific gravity; a high protein, vitamin A, sodium and chloride content but has got lower carbohydrate, fat and potassium than the breast milk. It contains antibody (IgA) produced locally.

Advantages: (1) The antibodies (IgA, IgG, IgM) and humoral factors (lactoferrin) provides immunological defense to the new born. (2) It has laxative action on the baby because of large fat globules.

PHYSIOLOGY OF LACTATION

Although, lactation starts following delivery, the preparation for effective lactation starts during pregnancy.

The physiological basis of lactation is divided into four phases:

- (a) Preparation of breasts (mammogenesis).
- (b) Synthesis and secretion from the breast alveoli (lactogenesis).
- (c) Ejection of milk (galactokinesis).
- (d) Maintenance of lactation (galactopoiesis).

TEN STEPS TO SUCCESSFUL BREASTFEEDING

Every facility providing maternity services and care for newborn infants should:

1. Have a written breastfeeding policy that is routinely communicated to all healthcare staff.
2. Train all healthcare staff in the skills necessary to implement this policy.
3. Inform all pregnant women about the benefits and management of breastfeeding.
4. Help mothers initiate breastfeeding within a half hour of birth.
5. Show mothers how to breastfeed and how to maintain lactation even if they are separated from their infants.
6. Give newborn infants no food or drink other than breast milk unless medically indicated.
7. Practice rooming-in. Allow mothers and infants to stay together 24 hours a day.

8. Encourage breastfeeding on demand.
9. Give no artificial teats or pacifiers (also called dummies and soothers) to breastfeeding infants.
10. Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from hospital or clinic.

MANAGEMENT OF NORMAL PUERPERIUM

The principles in management are: (1) To restore the health of the mother. (2) To prevent infection. (3) To take care of the breasts, including promotion of breastfeeding. (4) To motivate the mother for contraception.

Immediate attention: Immediately following delivery, the patient should be closely observed. She may be given a drink of her choice or something to eat, if she is hungry. Emotional support is essential. Usually the first feeling of mother is the sense of happiness and relief, with the birth of a healthy baby. The woman needs emotional support when she suffers from postpartum blues or stress due to newborn's prematurity, illness, congenital malformation or death.

REST AND AMBULANCE: Early ambulation after delivery is beneficial. After a good resting period, the patient becomes fresh and can breastfeed the baby or moves out of bed to go to the toilet. Early ambulation is encouraged. Advantages are: (1) Provides a sense of well-being (2) Bladder complications and constipation are less (3) Facilitates uterine drainage and hastens involution of the uterus (4) Lessens puerperal venous thrombosis and embolism. Following an uncomplicated delivery, climbing stairs, lifting objects, daily household work, cooking may be resumed.

HOSPITAL STAY: Early discharge from the hospital is an almost universal procedure. If adequate supervision by trained health visitors is provided, there is no harm in early discharge. Most women are discharged fit and healthy after 2 days of spontaneous vaginal delivery with proper education and instructions. Early discharge may be done in a few selected women. Some need prolonged hospitalization due to morbidities (infections of urinary tract, or the perineal wound, pain, or breastfeeding problems).

DIET: The patient should be on normal diet of her choice. If the patient is lactating, high calories, adequate protein, fat, plenty of fluids, minerals and vitamins are to be given. However, in non-lactating mothers, a diet as in non-pregnant is enough.

CARE OF THE BLADDER: The patient is encouraged to pass urine following delivery as soon as convenient. At times, the patient fails to pass urine and the causes are — (1) Unaccustomed position and (2) Reflex pain from the perineal injuries. This is common after a difficult labor or a forceps delivery. If the patient still fails to pass urine, catheterization should be done. Catheterization is also

indicated in case of incomplete emptying of the bladder evidenced by the presence of residual urine of more than 60 mL. Continuous drainage is kept until the bladder tone is regained. The underlying principle of the bladder care is to ensure adequate drainage of urine so that infection and cystitis are avoided.

CARE OF THE BOWEL: The problem of constipation is much less because of early ambulation and liberalization of the dietary intake. A diet containing sufficient roughage and fluids is enough to move the bowel. If necessary, mild laxative may be given at bed time.

SLEEP: The patient is in need of rest, both physical and mental. So she should be protected against worries and undue fatigue. Sleep is ensured providing adequate physical and emotional support. If there is any discomfort, such as after pains or painful piles or engorged breasts, they should be dealt with adequate analgesics (Ibuprofen).

CARE OF THE VULVA AND EPISIOTOMY WOUND: Shortly after delivery, the vulva and buttocks are washed with soap water down over the anus and a sterile pad is applied. The patient should look after personal cleanliness of the vulval region. The perineal wound should be dressed with spirit and antiseptic powder after each act of micturition and defecation or at least twice a day. The nurse should use sterilised gloves during dressing.

Cold (ice) sitz baths relieve pain. When the perineal pain is persistent, a vaginal and rectal examination is done to detect any hematoma, wound gaping or infection. For pain Ibuprofen is safe for nursing mothers.

CARE OF THE BREASTS: The nipple should be washed with sterile water before each feeding. It should be cleaned and kept dry after the feeding is over. A nursing brassiere provides comfortable support. Nipple soreness is avoided by frequent short feedings rather than the prolonged feeding, keeping the nipples clear and dry. Nipple confusion is a situation where the infant accepts the artificial nipple but refuses the mother's nipple. This is avoided by making the mother's nipple more protractile and not offering any supplemental fluids to the infant.

MATERNAL-INFANT BONDING (ROOMING-IN): It starts from first few moments after birth. This is manifested by fondling, kissing, cuddling and gazing at the infant. The baby should be kept in her bed or in a cot besides her bed. This not only establishes the mother-child relationship but the mother is conversant with the art of baby care so that she can take full care of the baby while at home. Baby-friendly hospital initiative promotes parent-infant-bonding, baby rooming with the mother and breastfeeding.

ASEPSIS AND ANTISEPTICS: Asepsis must be maintained especially during the first week of puerperium. Liberal use of local antiseptics, aseptic measures during perineal wound dressing, use of clean bed linen and clothing are positive steps. Clean surroundings and limited number of visitors could be of help in reducing nosocomial infection.

IMMUNISATION: Administration of anti-D-gamma globulin to unimmunized Rh-negative mother bearing Rh-positive baby.

MANAGEMENT OF AILMENTS

After pain — It is the infrequent, spasmodic pain felt in the lower abdomen after delivery for a variable period of 2–4 days. Presence of blood clots or bits of the afterbirths lead to hypertonic contractions of the uterus in an attempt to expel them out. This is commonly met in primipara. The pain may also be due to vigorous uterine contraction especially in multipara. The mechanism of pain is similar to cardiac anginal pain induced by ischemia. Both the types are excited during breastfeeding. The treatment includes massaging the uterus with expulsion of the clot followed by administration of analgesics (Ibuprofen) and antispasmodics.

Pain on the perineum: Never forget to examine the perineum when analgesic is given to relieve pain. Early detection of vulvo-vaginal hematoma can thus be made. Sitz baths (hot or cold) can give additional pain relief.

Correction of anemia: Majority of the women remain in an anemic state following delivery. Supplementary iron therapy (ferrous sulfate 200 mg) is to be given daily for a minimum period of 4–6 weeks.

Hypertension is to be treated until it comes to a normal limit. The physician should be consulted if proteinuria persists.

TO MAINTAIN A CHART: A progress chart is to be maintained noting the following: (1) Pulse, respiration and temperature recording 6 hourly or at least twice a day (2) Measurement of the height of the uterus above the symphysis pubis once a day in a fixed time with prior evacuation of the bladder and preferably the bowel too (3) Character of the lochia (4) Urination and bowel movement.

POSTPARTUM EXERCISE: The objectives of postpartum exercises are: (1) To improve the muscle tone, which are stretched during pregnancy and labor especially the abdominal and perineal muscles. (2) To educate about correct posture to be attained when the patient is getting up from her bed. This also includes the correct principle of lifting and working positions during day-to-day activities.

Advantages gained thereby are: (1) To minimize the risk of puerperal venous thrombosis by promoting arterial circulation and preventing venous stasis (2) To prevent backache (3) To prevent genital prolapse and stress incontinence of urine.

PROCEDURE: (1) Initially, she is taught breathing exercise and leg movements lying in bed. (2) Gradually, she is instructed to tone up the abdominal and perineal muscles and to correct the postural defects. These can well be taught by a trained physiotherapist. The exercise should be continued for at least 3 months. The common exercises prescribed are: (a) To tone up the pelvic floor muscles: The patient is asked to contract the pelvic muscles in a manner to withhold the act of defecation or urination and then to relax. The process is to be repeated as often as possible each day. (b) To tone up the abdominal muscles: The patient is to lie in dorsal position with the knees bent and the feet flat on the bed. The abdominal

muscles are contracted and relaxed alternately and the process is to be repeated several times a day. (c) To tone up the back muscles: The patient is to lie on her face with the arms by her side. The head and the shoulders are slowly moved up and down. The procedure is to be repeated 3–4 times a day and gradually increased each day.

Physical activity should be resumed without delay. Sexual activity may be resumed (after 6 weeks) when the perineum is comfortable and bleeding has stopped.

CHECK-UP AND ADVICE ON DISCHARGE: A thorough check-up of the mother and the baby is mandatory prior to discharge of the patient from the hospital. Discharge certificate should have all the important information as regard the mother and baby.

Advices include: (1) Measures to improve her general health. Continuance of supplementary iron therapy (2) Postnatal exercises (3) Procedures for a gradual return to day-to-day activities (4) Breastfeeding and care of the newborn (5) Avoidance of intercourse for a reasonable period of 4–6 weeks until lacerations or episiotomy wound are well healed (6) Family planning advice and guidance — Non-lactating women should practice some form of contraceptive measures after 3 weeks and the lactating women should start 3 months after delivery (7) To have postnatal check up after 6 weeks.

The method of contraception will depend upon breastfeeding status, state of health and number of children. Natural methods cannot be used until menstrual cycles are regular. Exclusive breastfeeding provides 98% contraceptive protection for 6 months. Barrier methods may be used. Steroidal contraceptions — combined preparations are suitable for nonlactating women and should be started 3 weeks after. In lactating women it is avoided due to its suppressive effects. Progestin only pill may be a better choice for them. Other progestins (DMPA, Levonorgestrel implants) may be used. IUDs are also a satisfactory method irrespective of breastfeeding status.

IMMEDIATE CARE OF THE NEWBORN

Soon after the delivery of the baby, it should be placed on a tray covered with clean dry linen with the head slightly downwards (15°). It facilitates drainage of the mucus accumulated in the tracheobronchial tree by gravity. The tray is placed between the legs of the mother and should be at a lower level than the uterus to facilitate gravitation of blood from the placenta to the infant.

Air passage (oropharynx) should be cleared of mucus and liquor by gentle suction.

Apgar rating at 1 minute and at 5 minutes is to be recorded.

Clamping and ligature of the cord—The cord is clamped by two Kocher's forceps, the nearest one is placed 5 cm away from the umbilicus and is cut in between. Two separate cord ligatures are applied with sterile cotton threads 1 cm

apart using reef-knot, the proximal one being placed 2.5 cm away from the navel. Leaving behind a length of the cord attached to the navel not only prevents inclusion of the embryonic structure, if present, but also facilitates control of primary haemorrhage due to a slipped ligature. The cord is divided with scissors about 1 cm beyond the ligatures taking aseptic precautions so as to prevent cord sepsis.

The purpose of clamping the cord on the maternal end is to prevent soiling of the bed with blood and to prevent fetal blood loss of the second baby in undiagnosed monozygotic twin.

Delay in clamping for 2–3 minutes or till cessation of the cord pulsation facilitates transfer of 80-100 mL blood from the compressed placenta to a baby when placed below the level of uterus. This is beneficial to a mature baby but may be deleterious to a pre-term or a low birth weight baby due to hypervolemia. But early clamping should be done in cases of Rh-incompatibility (to prevent antibody transfer from the mother to the baby) or babies born asphyxiated or one of a diabetic mother.

Quick check is made to detect any gross abnormality and the baby is wrapped with a dry warm towel.

The identification tape is tied both on the wrist of the baby and the mother.

Once the management of third stage is over (usually 10–20 minutes), baby is given to the mother.

Requirements for work results.

- Counsel the woman.
- Assess the woman's condition
- Collection of anamnesis (general, including mental illnesses, obstetric, gynecological, health status of the child's father).
- Inspection and palpation of the mammary glands, measurement of the standing height of the uterine fundus with data entry in the gravidogram; measurement of blood pressure, pulse (frequency, rhythmicity), body temperature, measurement of body weight (for all pregnant women at each visit), examination of the lower extremities for the presence of varicose veins, auscultation of fetal heart rate (for all pregnant women from the 25th-26th week of pregnancy).
- Internal examination
- Laboratory studies
- Tactics and principles of patient management
- Analysis and discussion of survey results

- Multimedia presentation on the subject of the lesson.

Нетипові ситуаційні питання:

- Які об'єктивні ознаки пологової діяльності та її ефективності в II періоді пологів?
- Які особливості ведення II періоду пологів?
- Які існують методи визначення динаміки просування голівки плоду?
- Чим характеризується III період пологів, його тривалість?
- Які механізми відшарування плаценти від стінки матки?
- У чому полягає активна тактика ведення III періоду пологів?
- У чому полягає очікувальна тактика ведення III періоду пологів?
- Який обсяг фізіологічної крововтрати під час пологів і методи його контролю?
- Які сучасні методи знеболювання пологів?
- Які принципи оцінки стану новонародженого?
- Який сучасний підхід до проведення первинного туалету новонародженого?
- У чому полягає необхідність забезпечення «теплого ланцюжка» та алгоритм його виконання?

Матеріали контролю для заключного етапу заняття: задачі, тести і т.д.

Задача 1.

В пологовий будинок прийшла вагітна, з почовшою пологовою діяльністю. Вагітна жінка є повторнородиллею 30-ти років, з терміном 37-38 тижн. При огляді у жінки плід знаходиться в продольній позиції, головне передлежання, перша позиція, задній вид. В теперішній час пологи тривають тривають 8 годин. Перейми через кожну хвилину по 50 секунд, активні. Серцебиття плоду – 156/хв., ритмічне. Під час зовнішнього дослідження голівка розташована в порожнині малого тазу. Вагінально: розкриття шийки матки повне, голівка плоду в площині виходу з малого газу. Стрілоподібний шов в прямому розмірі, мале тім'ячко біля лона. Який це період пологів?

1. Визначіть попередній діагноз
2. Чи необхідно застосовувати методи допомоги жінці
3. Яка тактика лікаря.

Правильні відповіді:

1. Вагітність-II, 37-38 тижн. Положення плода продольне, головне передлежання, I позиція, задній вид. Пологи, другий період.
2. З врахуванням всіх заходів, вагітна може народити самостійно
3. Тактика лікаря в даній ситуації спостерігати за рухами плода, й використовувати методики, що можуть бути необхідними

1. Тестові завдання КРОК-2

Пацієнтка 22-х років звернулася до жіночої консультації зі скаргами на затримку менструації протягом 1,5 місяців, нудоту, втомлюваність, сонливість, дратівливість. В ході огляду на її обличчі та сосках виявлена виражена пігментація. З боку внутрішніх органів патології не виявлено. Під час огляду в дзеркалах визначається ціаноз слизової оболонки піхви та шийки матки; в ході бімануального дослідження – збільшення матки, її гіперантефлексія, асиметрія. З чим найімовірніше пов'язані перераховані скарги та дані бімануального дослідження.

- A. Захворювання шлунково-кишкового тракту
- B. Порушення менструального циклу
- C. Ектопічна вагітність
- D. Пухлина матки
- E. Маткова вагітність

У породіллі 22-х років після відходження вод з'явилися безперервні, дуже болючі перейми. Об'єктивно: розміри таза 25-28-31-21 см, маса плода – 4200 г. Матка постійно в тонусі, контракційне кільце на рівні пупка. Нижній сегмент матки болючий. При піхвовому дослідженні: шийка матки відкрита повністю, плідного міхура немає, голівка плода виповнює термінальну лінію, сагітальний шов в прямому розмірі. Серцебиття плода – 136/хв. Яка тактика лікаря буде найбільш доречною?

- A. Провести вакуум-екстракцію плода
 - B. Накласти акушерські щипці
 - C. Зробити комбінований поворот плода на ніжку, з наступною його екстракцією
 - D. Виключити пологову діяльність та зробити кесарів розтин
 - E. Зробити плодоруйнівну операцію
- Правильні відповіді: 1-E; 2-D

Нетипові ситуаційні питання:

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- У чому полягає необхідність забезпечення «теплого ланцюжка» та алгоритм його виконання?

Protocols, standards, regulatory materials:

Medical care standards "Normal pregnancy" and Evidence-based clinical guideline "Normal pregnancy" of Ministry of Health of Ukraine dated 08/09/2022

Evaluation of the independent work of higher education applicants

The independent and individual work of applicants involves the independent processing of educational material presented at the ISW, and is carried out in the following forms: studying educational, specialized literature, directive documents, writing essays on the topics of missed classes, etc.

Independent work of students of higher education during the ongoing control of mastering the topics of the sections in the corresponding classroom classes. Mastery of topics that are assigned only to independent work is checked during test control.

Evaluating individual tasks of higher education applicants

In order to increase the arithmetic average of all grades received by the applicant during the study of the discipline, the grade for individual tasks is awarded to the applicant only under the condition of their successful completion and defense.

4.Current success rate

Current control: oral survey, assessment of communication skills during role play, solving situational clinical tasks, assessment of activity in class.

Final control: credit.

Evaluation of the current educational activity in a practical lesson:

1. Evaluation of theoretical knowledge on the subject of the lesson:

- methods: survey, solving a situational clinical problem
- maximum score – 5, minimum score – 3, unsatisfactory score – 2.

2. Assessment of work with patients on the subject of the lesson:

- methods: assessment of: a) communication skills of communication with the patient b) the correctness of prescribing and evaluating laboratory and instrumental studies before using a contraceptive c) the ability to conduct family planning counseling.

- maximum score – 5, minimum score – 3, unsatisfactory score – 2.

The grade for one practical lesson is the arithmetic average of all components and can only have a whole value (5, 4, 3, 2), which is rounded according to the statistical method.

Criteria of ongoing assessment at the practical class

«5»	The student is fluent in the material, takes an active part in discussing and solving a situational clinical problem, confidently demonstrates practical skills and interprets the results of clinical, laboratory and instrumental studies, expresses his opinion on the topic, and demonstrates clinical thinking.
«4»	The student is well versed in the material, participates in the discussion and solution of situational clinical problems, demonstrates practical skills during the examination and interprets the results of clinical, laboratory and instrumental studies with some errors, expresses his opinion on the topic, and demonstrates clinical thinking.
«3»	The student does not have enough material, uncertainly participates in the discussion and solution of the situational clinical problem, demonstrates practical skills during the examination and interprets the results of clinical, laboratory and instrumental studies with significant errors.
«2»	The student does not have the material, does not participate in the discussion and solution of the situational clinical problem, and does not demonstrate practical skills during the examination and interpret the results of clinical, laboratory and instrumental studies.

5. Recommended literature

Basic:

1. Obstetrics: Normal and Problem Pregnancies, 7th Edition S. Gabbe, J. R. Niebyl, J. L. Simpson, M. B. Landon, H. L. Galan, E. R. M. Jauniaux, D. A. Driscoll, V. Berghella and W. A. Grobman, Elsevier. – 2017. – 1320 pp.
2. Williams Manual of Obstetrics (24th Ed) F. G. Cunningham, K. J. Leveno, S. L. Bloom, C. Y. Spong, J. S. Dashe, B. L. Hoffman, B. M. Casey, J. S. Sheffield, McGraw-Hill Education/Medical. – 2014. – 1377 pp.
3. DC Dutta's Clinics in Obstetrics / edited by Hiralal Konar- 2021- 306 pp.
4. Llewellyn-Jones Fundamentals of Obstetrics and Gynaecology (10th Ed). Jeremy Oats, Suzanne Abraham. Elsevier. 2016. – 384 pp.
5. The FIGO Textbook of Pregnancy Hypertension. An evidence-based guide to monitoring, prevention and management. L. A. Magee, P. Dadelszen, W. Stones, M. Mathai (Eds), The Global Library of Women's Medicine. – 2016. – 456 pp.
6. Mayo Clinic Guide to a Healthy Pregnancy. (2nd Ed) Myra J. Wick / ebook- 2018. – 946 pp.
7. Clinical Obstetrics and Gynaecology: 4th Edition/ Brian A. Magowan, Philip Owen, Andrew Thomson. - 2018. – 416 pp.
8. Gynecologic Health Care: With an Introduction to Prenatal and Postpartum Care: With an Introduction to Prenatal and Postpartum Care 4th Edition / K. D. Schuiling, F. E. Likis – 2020/- 500 pp.
9. Oats, Jeremy Fundamentals of Obstetrics and Gynaecology [Text]: Llewellyn-Jones Fundamentals of Obstetrics and Gynaecology / J. Oats, S. Abraham. – 10th ed. – Edinburgh [etc.]: Elsevier, 2017. – VII, 375 p.
10. Obstetrics: Normal and Problem Pregnancies, 7th Edition S. Gabbe, J. R. Niebyl, J. L. Simpson, M. B. Landon, H. L. Galan, E. R. M. Jauniaux, D. A. Driscoll, V. Berghella and W. A. Grobman, Elsevier. – 2017. – 1320 pp.
11. Obstetrics and Gynecology : in 2 vol. : textbook. Vol. 1. Obstetrics / V.I. Gryshchenko, M.O. Shcherbina, B.M. Ventskivskyi et al. ; edited by V.I. Gryshchenko, M.O. Shcherbina. — 2nd edition. — K. : AUS Medicine Publishing, 2018. — 392 p.
12. Oxford Textbook of Obstetrics and Gynaecology / edited by Sabaratanam Arulkumar, William Ledger et al/ - 2020- 2546 pp.

Additional:

1. Obstetrics by Ten Teachers (20th ed) Louise C. Kenny, Jenny E. Myers. – CRC Press. – 2017. – 342 pp.
2. Current Progress in Obstetrics and Gynaecology. Vol 4. Eds. J. Studd, Seang Lin Tan, F. Chervenak. – 2017. – 419 pp.
3. Recent Advances in Obstetrics and Gynaecology. Vol 26. W. Ledger, J. Clark. – JP Medical. – 2015. – 230 pp.

4. Proactive Support of Labor. Reuwer P., Bruinse H., Franx A. – 2015. – 216 pp.
5. The model of screening for preeclampsia in the second and third trimesters of gestation / L. Berlinska, V. Marichereda, O. Rohachevskyi, A. Volyanska, G. Lavrynenko // Electronic Journal of General Medicine. - 2023 - 20(3), em473, <https://www.ejgm.co.uk/>
6. Current "Clinical protocols", approved by order of the Ministry of Health of Ukraine for Obstetrics and Gynecology.
 - Order of the Ministry of Health of Ukraine dated August 9, 2022 No. 1437 "On approval of standards of medical care "Normal pregnancy".
 - Order of the Ministry of Health of Ukraine dated January 26, 2022 No. 170 "On approval of the Unified clinical protocol of primary, secondary (specialized), tertiary (highly specialized) medical care "Physiological childbirth".
 - Order of the Ministry of Health of Ukraine dated January 24, 2022 No. 151 "On approval of the Unified clinical protocol of primary, secondary (specialized), tertiary (highly specialized) medical care "Hypertensive disorders during pregnancy, childbirth and the postpartum period."
 - Order of the Ministry of Health of Ukraine dated 09/24/2022 No. 1730 "On approval of standards of medical care "Ectopic pregnancy".

Electronic information resources

1. <https://www.cochrane.org/>
2. <https://www.ebcog.org/>
3. <https://www.acog.org/>
4. <https://www.uptodate.com>
5. <https://online.lexi.com/>
6. <https://www.ncbi.nlm.nih.gov/>
7. <https://pubmed.ncbi.nlm.nih.gov/>
8. <https://www.thelancet.com/>
9. <https://www.rcog.org.uk/>
10. <https://www.npwh.org/>
11. <http://www.aagu.com.ua/> асоціація акушер-гінекологів України