Ministry of Health of the Republic of Moldova

State University of Medicine and Pharmacy "Nicolae Testemitanu"

University Centre for Simulation in Medical Training (CUSIM)

Practical skills and basic procedures in obstetrics and gynecology.

Clinical guide with elements of medical training through simulation for students

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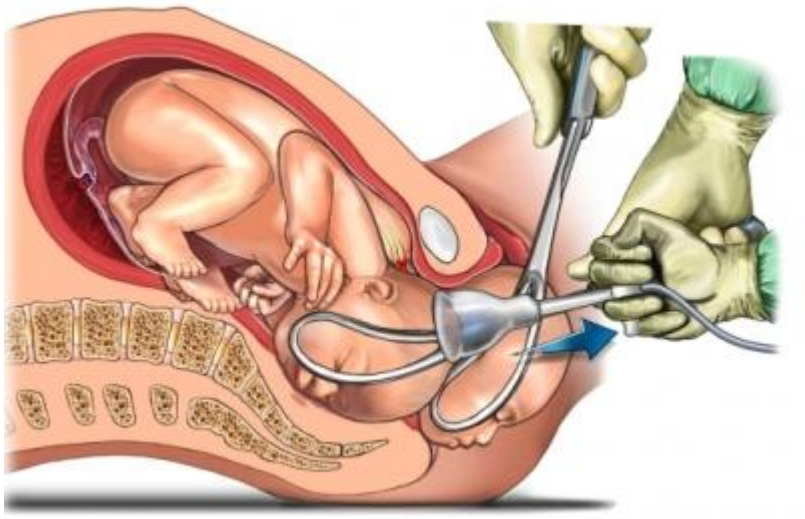

Chisinău · 2017

1. Fundal height measurement

Purpose: Symphysis-fundal height measurement refers to the distance measured in centimetres on the longitudinal axis of the abdomen from the top of the fundus to the upper border of the symphysis pubis. It is an indicative tool for assessing fetal growth and gestational age.

Material required:

1. Water, soap, clean towel
2. A light source
3. Consultation couch with screen or curtain
4. Non elastic centimetric tape

Equipment: Low-fidelity mannequin (task trainer) to simulate the birth and Leopold palpation.

Measurement: fundal height is the distance between the bottom of the uterus and the upper edge of the symphysis pubis. Symphyseal fundal height is recommended to be performed at every scheduled antenatal visit, from 25-26 weeks of pregnancy to monitor fetal growth.

Technique and tips for fundal height measurement:

1. Ensure a private space to preserve patient confidentiality.
2. Introduce yourself, inform and explain the procedure of measurement to the patient and obtain maternal consent.
3. Ask the woman to empty her bladder. It has been demonstrated that the fundal height can be higher if the woman has a full bladder.
4. Perform hand hygiene. Wash your hands with soap and water and wipe with a clean towel.
5. Position the woman in a semi-recumbent position with her legs extended.
6. Warm your hands, rubbing them together. Warm hands minimize maternal discomfort and potential for inducing contraction of the uterus.
7. Perform abdominal palpation to enable accurate identification of the uterine fundus. Place the ulnar edge of the hand on the woman's abdomen, at the level of xiphoid appendix of the sternum, parallel to the pubic symphysis, for palpation of superior pole of the uterine fundus.
8. Use a non-elastic tape measure with the centimeters on the underside to reduce bias. Secure the tape at the fundus with one hand.
9. Run the tape measure along the longitudinal axis to the uppermost border of the symphysis pubis without correcting to the abdominal midline. The tape should stay in contact with the skin (figure 1). Measure only once.
10. Briefly communicate examination findings to the patient. Provide any explanations required by patient during the examination.
11. Ask the patient to get up and get dressed. Greet the patient.

12. Perform hand hygiene. Wash your hands with soap and water and wipe with a clean towel. If you used disposable gloves, throw them in the box for used sanitary materials.

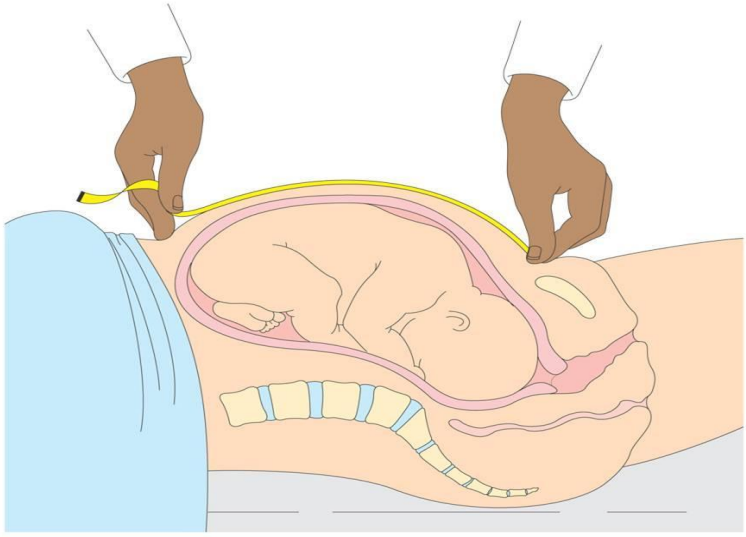

Figura 1. Technique for fundal height measurement.

Interpretation: After 20 weeks of pregnancy the fundal height must correspond to the uterine pregnancy in weeks ± 2 cm and after 36 weeks to the term of pregnancy ± 3 cm. A measurement discrepancy of +/- 3 cm and more after 20 weeks of pregnancy can be suggestive of a fetus that is small/large for gestational age, multiple pregnancy, or an inaccurate estimated due date and represent an indication for further investigations: ultrasound, amniotic fluid index determination, Doppler USG, CTG recording.

	EVALUATION CHECKLIST : 1. FUNDAL HEIGHT MEASUREMENT	Done correctly 1 p	Not done/ Done incorrectly 0 p
1.	Ensured a private space to preserve patient confidentiality.		
2.	Introduced his(her)self, informed and explained the procedure of measurement to the patient and obtained maternal consent.		
3.	Performed hand hygiene. Washed his/her hands with soap and water and wiped with a clean towel.		
4.	Asked the woman to empty her bladder.		
5.	Ensured correct position of the woman in a semi-recumbent position with her legs extended.		
6.	Warmed his/her hands, rubbing them together.		
7.	Performed abdominal palpation to enable accurate identification of the uterine fundus. Placed the ulnar edge of the hand on the woman's abdomen, at the level of xiphoid appendix of the sternum, parallel to the pubic symphysis, for palpation of superior pole of the uterine fundus.		
8.	Measured the distance between the top of the uterine fundus and the upper most border of the symphysis pubis, running the tape along the longitudinal axis of the uterus, without correcting to the abdominal midline.		
9.	Used a non-elastic tape measure with the centimeters on the underside to reduce bias.		
10.	Communicated examination findings to the patient and provided any explanations required by patient during the examination.		
11.	Greeted the patient.		
12.	Threw used disposable gloves in the box for used sanitary materials.		
13.	Performed hand hygiene. Washed hands with soap and water and wiped with a clean towel.		

Total score, points	
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Student/rezident _____ Group _____

Teacher 1 _____ Signature _____

Teacher 2 _____ Signature_____

2. PERFORMING EXTERNAL PELVIMETRY

External pelvimetry measures distances between some fixed points on the external surface of the bony pelvis. It is made using a pelvimeter.

Purpose: assessment of the female pelvis and detection of pelvic dystocia (shape, symmetry, size).

Material required:

1.Water, soap, clean towel

2. Disposable gloves

3. A light source

4. Consultation couch with screen or curtain

5. Martin / Baudelocque pelvimeter, non elastic metric tape

Equipment: Low-fidelity mannequin (task trainer) to simulate the birth and Leopold palpation

Measurements:

- Antero-Superior Iliac Interspinous diameter
- Iliac intercristal diameter,
- Intertrochanter Diameter
- Intertuberous Diameter (transverse diameter of the pelvic outlet)
-Antero-Posterior (Baudelocque's) Diameter (external conjugate)
- The Rhombus of Michaelis

Technique and tips for external pelvimetry:

1. Ensure a private space to preserve patient confidentiality.
2. Introduce yourself, inform and explain the procedure of measurement to the patient and obtain maternal consent.
3. Perform hand hygiene. Wash your hands with soap and water and wipe with a clean towel OR use disposable gloves.
4. Position the woman in a supine position with flexed knees to relax the abdominal muscles. Place a small pillow under the patient's head for her comfort.
5. Warm your hands, rubbing them together. Warm hands minimize maternal discomfort and potential for inducing contraction of the uterus.
6. Provide any explanations required by patient during the examination.
7. For iliac interspinous diameter identifie by palpation anterior superior iliac spines position and measure the distance between them using the pelvimeter (Figure 3). **Interpretation:** N = 24-25 cm.
8. For iliac intercristal diameter identifie by palpation the farest points of the iliac crests and measure the distance between them (Figure 3). **Interpretation**: N = 28-29 cm

9. For intertrochanter diameter identifie the greater trochanters of femurs and measure the distance between most protruding points (Figure 3). **Interpretation**: N = 32 cm.

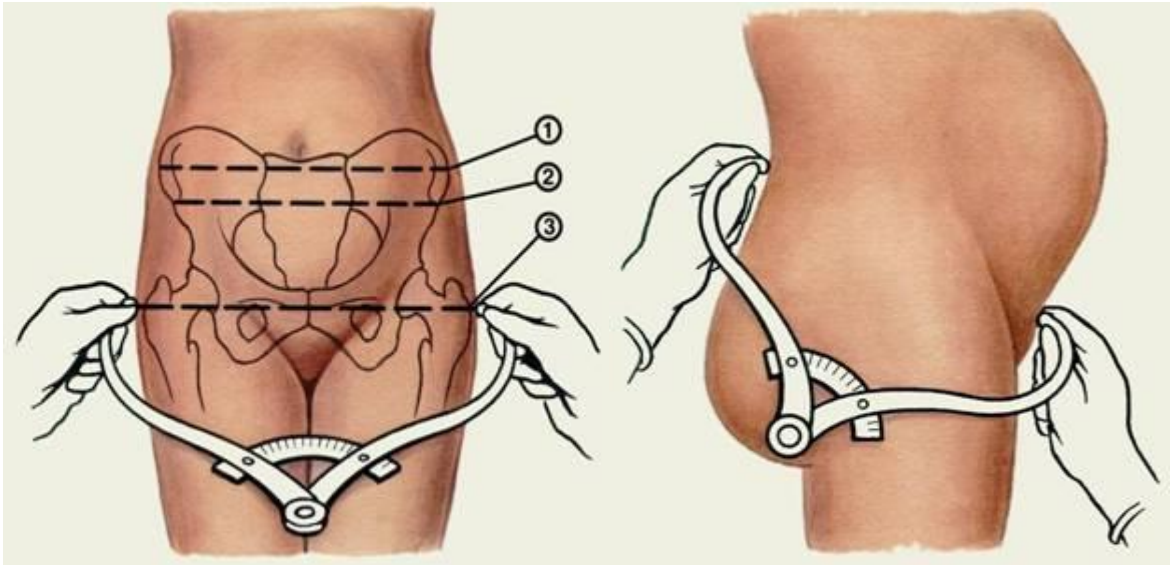

Figure 3. External pelvimetry (1- iliac intercristal diameter ; 2- iliac intersinous diameter ; 3- intertrochanter diameter). Mesurement of external conjugate.

10. For intertuberous diameter (transverse diameter of the pelvic outlet) identifie by palpation ischial tuberosities position and measure the tape the distance between internal faces of them. To the measured length add 2 cm, which represent the soft tissue thickness (Tarnier method). **Interpretation**: N = 11 cm.
11. For measuring the anterior-posterior diameter Baudeloque or external conjugate, position the patient in right lateral decubitus, right knee flexed and left lower limb in extension. Using the pelvimeter, measure the distance between the upper border of the symphysis pubis to the middle of the promontory (the spinous process of the 5th lumbar vertebra) (Figure 3). **Interpretation:** N = 20 cm. By subtracting 9 cm from the external conjugate, the true (obstetric) conjugate can be calculated.
12. Ask the patient to get up and get dressed. Greet the patient.
13. Perform hand hygiene. Wash your hands with soap and water and wipe with a clean towel.
14. If you used disposable gloves, throw them in the box for used sanitary materials.

	EVALUATION CHECKLIST: 2. PERFORMING EXTERNAL PELVIMETRY	Done correctly 1p	Not done/ done incorrectly 0 p
1.	Ensured a private space to preserve patient confidentiality.		
2.	Introduced his(her)self, informed and explained the procedure to the patient and obtained maternal consent.		
3.	Performed hand hygiene. Washed his/her hands with soap and water and wiped with a clean towel OR used disposable gloves.		
4.	Ensured correct position of the woman in a supine position with flexed knees to relax the abdominal muscles.		
5.	Warmed his/her hands, rubbing them together.		
6.	Identified by palpation anterior superior iliac spines position.		
7.	Measured using the pelvimeter and interpreted correctly the iliac interspinous diameter.		
8.	Identified by palpationthe farest points of the iliac crests.		
9.	Measured using the tape and interpreted correctly the iliac intercristal diameter.		
10.	Identified by palpation the greater trochanters of femurs and the most protruding their points.		
11.	Measured using the pelvimeter and interpreted correctly the intertrochanter diameter.		
12.	Identified by palpation the ischial tuberosities position.		
13.	Measured using the pelvimeter and interpreted correctly the intertuberous diameter.		
14.	Ensured correct position of the woman for measurement of the external conjugate: in right lateral decubitus, right knee flexed and left lower limb in extension.		
15.	Measured correctly using the pelvimeter the external conjugate: the distance between the upper border of the symphysis pubis to the middle of the promontory (the spinous process of the 5th lumbar vertebra).		
16.	Interpreted correctly the external conjugate value.		
17.	Communicated examination findings to the patient and provided any explanations required by patient during the examination.		
18.	Greeted the patient.		
19.	Threw used disposable gloves in the box for used sanitary materials.		
20.	Performed hand hygiene. Washed hands with soap and water and wiped with a clean towel.		

Total score, points	
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Student/rezident _____ Group _____

Teacher 1 _____ Signature _____

Teacher 2 _____ Signature_____

3. PERFORMING INTERNAL PELVIMETRY

Internal pelvimetry measures the distances between specific points on the internal surface of the bony pelvis. It is performed by gynecologic vaginal examination of the pregnant woman in lithotomy position.

Purpose: To assess the bony pelvis (shape, symmetry, size) and detect pelvic anomalies.

Material required:

1.Water, soap, clean towel

2. A light source

3. Consultation couch with screen or curtain

4. Sterile disposable gloves

5. Martin / Baudelocque pelvimeter, non elastic metric tape

Equipment: Low-fidelity mannequin (task trainer) to simulate the birth and Leopold palpation

Measurements:

- The diagonal conjugate (the distance from the promontory to the inferior margin of pubic symphysis)
- The subpubic angle
- Assessment of pelvic excavation

Technique and tips for internal pelvimetry:

1. Ensure a private space to preserve patient confidentiality.
2. Introduce yourself, inform and explain the procedure of measurement to the patient and obtain maternal consent.
3. Perform hand hygiene. Wash your hands with soap and water and wipe with a clean towel
4. Use sterile disposable gloves.
5. Place the woman in lithotomic position.
6. Provide any explanations required by the patient during the examination.
7. For measuring the diagonal conjugate, two fingers of either gloved hand are introduced into the vagina and and attempts to touch the promontory. Avoid confusion with the anterior surface of the sacrum. The promontory cannot be reached in normal pelvises. When accessible, it can be palpated on the midline as a transverse prominence. Mark the glove with the other hand close to the thumb at the orifice of the vagina while still touching the promontory. After removing the fingers, measure the distance from this level to the point to the tip of the middle finger medius, corresponding to the diagonal conjugate (figure 5). **Interpretation:** in a normal pelvis the diagonal conjugate measures from 12.5 to 13 cm.
8. The true conjugate is calculated by subtracting approximately 1.5-2 cm from the diagonal conjugate.

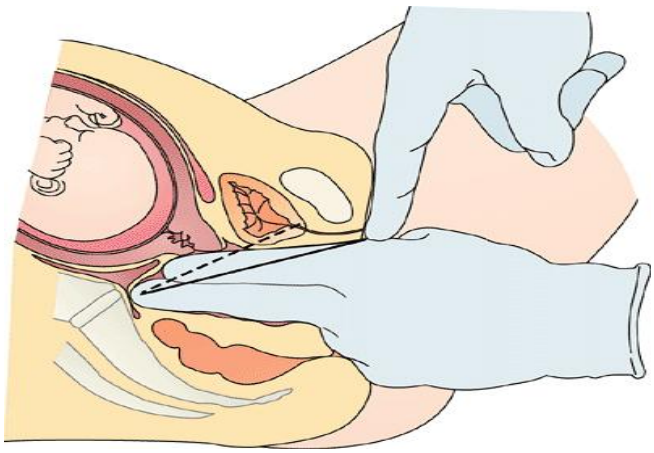

Figure 5. Measurement of diagonal conjugate.

9. To assess the vertical sacral curve, move the index and the second fingers from the top to the bottom over the anterior surface of the sacrum. Under normal circumstances, it describes anterior concave curve.
10. To assess the subpubic angle, which determines the type of pubic arch, apreciate the angle formed at pubic arch by the convergence of the inferior branches of the ischium and pubis on either side (Figure 6).**Interpretation:** the subpubic angle in females measuresnormally 80-90 degrees. A smaller angle suggests a possibility of dystocia and requires careful evaluation of the pelvis.
11. Ask the patient to get up and get dressed. Greet the patient.
12. Throw the disposable gloves in the box for used sanitary materials.
13. Perform hand hygiene. Wash your hands with soap and water and wipe with a clean towel.

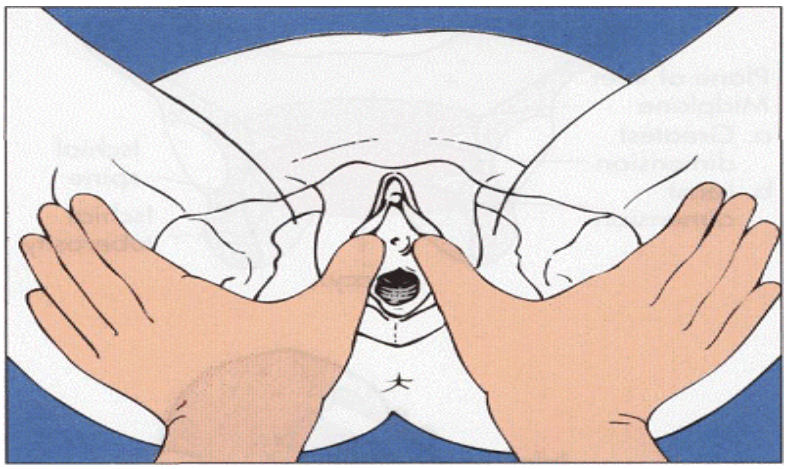

Figura 6. Subpubic angle assessment. (Barkauskas, V., Baumann, L, & Darling-Fisher, C. [2002], *Health and physical assessment* [3rd ed.]. St. Louis: Mosby.)

	EVALUATION CHECKLIST: 3. PERFORMING INTERNAL PELVIMETRY	Done correctly 1 p	Not done/ Done incorrectly 0 p
1.	Ensured a private space to preserve patient confidentiality.		
2.	Introduced his(her)self, informed and explained the procedure to the patient and obtained maternal consent.		
3.	Performed hand hygiene. Washed his/her hands with soap and water and wiped with a clean towel.		
4.	Used sterile disposable gloves.		
5.	Ensured correct position of the woman in lithotomy position.		
6.	Covered the patient's abdomen from the mid to the knees, keeping eye contact with the patient.		
7.	Measured correctly the promonto-subpubic diameter (diagonal conjugate) by vaginal examination.		
8.	Determined and interpreted correctly the length of the promonto-subpubic diameter (diagonal conjugate)		
9.	Calculated correctly the true conjugate from the diagonal conjugate.		
10.	Assessed the sacral curve.		
11.	Assessed and interpreted correctly the subpubic angle.		
12.	Communicated examination findings to the patient and provided any explanations required by patient during the examination.		
13.	Greeted the patient.		
14.	Threw used disposable gloves in the box for used sanitary materials.		
	Performed hand hygiene. Washed hands with soap and water and wiped with a clean towel.		

Total score, points	
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Student/rezident _____ Group _____

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4. LEOPOLD`S MANEUVERS

Leopold`s maneuvers represent a technique for examination by transabdominal palpation of the uterus and fetus.

Purpose: to determine the lie, the presentation and the position of the fetus, and the degree of engagement of the presenting part.

Material required:

1.Water, soap, clean towel

2. A light source

3. Consultation couch with screen or curtain

4. Disposable gloves

Equipment: Low-fidelity mannequin (task trainer) to simulate the birth and Leopold palpation.

Technique and tips for Leopold's maneuvers:

1. Ensure a private space to preserve patient confidentiality.
2. Introduce yourself, inform and explain the procedure to the patient and obtain maternal consent.
3. Perform hand hygiene. Wash your hands with soap and water and wipe with a clean towel.
4. Use disposable gloves.
5. Instruct woman to empty her bladder first.
6. Place woman in dorsal recumbent position, supine with knees flexed to relax abdominal muscles. Place a small pillow under the head for comfort.
7. Drape properly to maintain privacy.
8. Explain procedure to the patient.
9. Warms hands by rubbing together. (Cold hands can stimulate uterine contractions).
10. Use the palm for palpation not the fingers.

Maneuver One: Fundal Grip - Bimanual palpation of the uterine fundus. **Purpose:** to determine the presentation. **Technique:** Sit on the bed to the right of the pregnant woman, face towards patient, appreciate the uterine contour and palpate the uterine fundus with both hands (cupping your hands around the fundus) to determine which fetal part is in this portion of the uterus. Feel for shape, consistency and mobility. **Interpretation:** The breech (buttocks) is softer, and more irregular in shape than the head. The head is harder and has a round, uniform shape (figure 7). If the fetus is in a cefalic presentation, the breech is felt in the fundus. If the presentation is breech, the head is felt in the fundus.

Maneuver Two: Umbilical Grip - Bimanual palpation of the flanks. ***Purpose:*** to determine the position of the fetus. ***Technique:*** Position the palms of your hands on the sides of the patient`s abdomen. Use the palmar surface of the hands and palpate either side of the abdomen to find the

fetal back and limbs and assess size. Hold the left hand steady on one side of the uterul while palpating the opposite side of the uterus with the right hand moving it gently from the bottom to the lower segment of the uterus, exerting gentle pressure, but profound. Then hold the right hand steady while palpating the opposite side of the uterus with the left hand. ***Interpretation:*** The fetal back is a smooth, convex surface. The fetal arms and legs feel nodular, irregular and mobile (Figure 7)

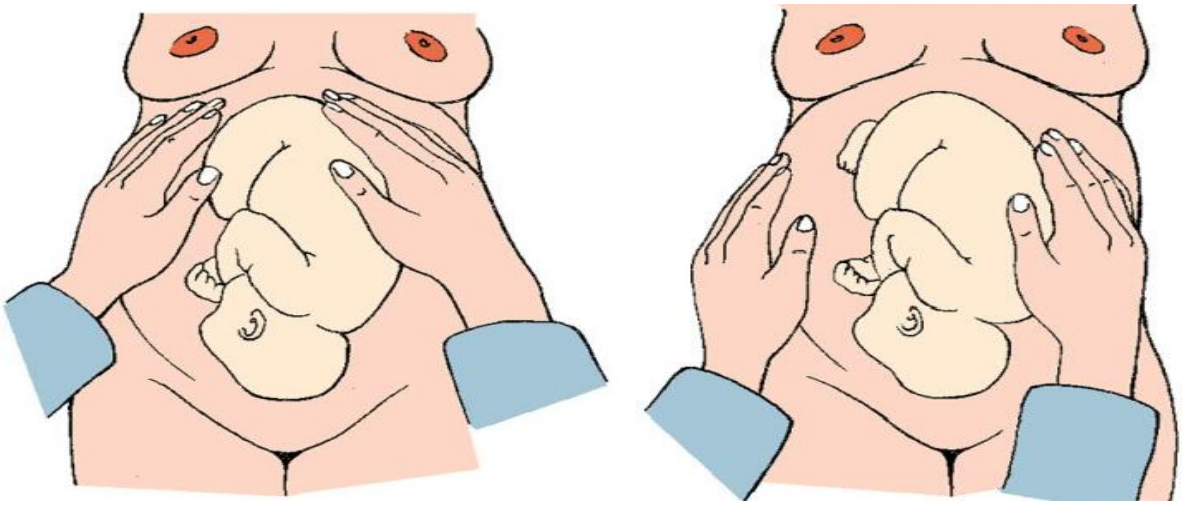

Figure 7. I and II Leopold's Maneuvers

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Maneuver Three: Pawlick's Grip - Palpation of the uterine lower segment (Figure 8). **Purpose**: to identify the part of the fetus that is above the inlet and its engagementl. **Technique:** use the fingers and thumb on the right hand to grasp the lower abdomen area located above the pubic symphysis and press inward over the inlet to the true pelvis. Note any movement and determine whether the presenting part is soft or firm. The findings should validate what is determined in the first maneuver. **Interpretation:** In a breech, the buttocks will be smaller in comparison to the head that was felt in the fundus. If there is movement, the presenting part is not engaged. The engaged presenting part is immobile. Fetal head is engaged when the maximum transverse diameter (biparietal) crossed the pelvic inlet or when only 2/5 of the fetal head is palpable above the symphysis pubis.

Maneuver Four: Pelvic Grip - Bimanual palpation of the lower segment (Figure 8). ***Purpose:*** To complete the third maneuver, establishing the engagement and the degree of flexion of the fetal head in case of cephalic presentations. ***Technique:*** Face the patient`s feet, and place both hands on both sides of her abdomen to determine the cephalic prominence, or brow. Gently move the fingers on both hands toward the pubis by sliding the hands over the sides of the patient's uterus, and the side where the greatest resistance to the descending fingers is the location of the brow. Note that this maneuver applies only to cephalic presentation. ***Interpretation:*** If you find the cephalic prominence on the opposite side of the fetal back and on

the same side as the feet, hands and elbows, the head is flexed and the vertex is presenting. If you find the cephalic prominence on the same side as the back, then the head is extended and the face is presenting. A head that cannot be felt has likely descended.

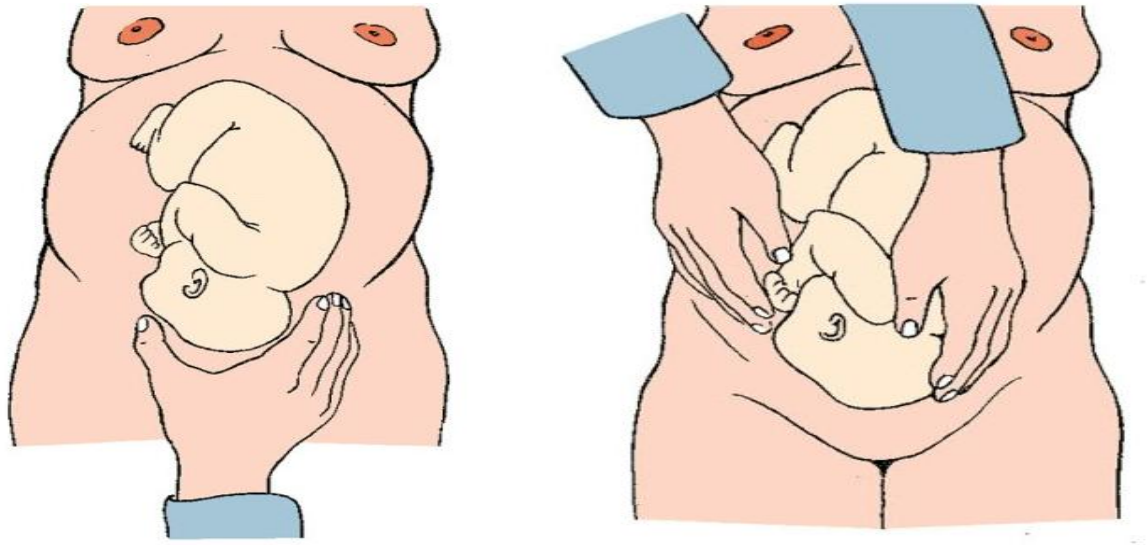

Figure 8. III and IV Leopold's Maneuvers

http://s974.photobucket.com/user/malish_wl/media/Fotosearch_COG12025.jpg.html

11. Ask the patient to get up and get dressed. Greet the patient.
12. Throw the disposable gloves in the box for used sanitary materials.
13. Perform hand hygiene. Wash your hands with soap and water and wipe with a clean towel.
14. At the end of the examination, note the atitude, position and presented part of the fetus

	EVALUATION CHECKLIST 4. PERFORMING LEOPOLD'S MANEUVERS	Done correctly 1 p	Not done/ Done incorrectly 0p
1.	Ensured a private space to preserve patient confidentiality.		
2.	Introduced his(her)self, informed and explained the procedure to the patient and obtained maternal consent.		
3.	Asked the woman to empty her bladder.		
4.	Performed hand hygiene. Washed his/her hands with soap and water and wiped with a clean towel.		
5.	Used disposable gloves.		
6.	Ensured correct position of the woman in dorsal recumbent position, supine with knees flexed to relax abdominal muscles.		
7.	Warmed his/her hands, rubbing them together.		
8.	Used palms but not fingers for palpation		
9.	Performed correctly I Leopold Maneuver		
10.	Performed correctly II Leopold Maneuver		
11.	Performed correctly III Leopold Maneuver		
12.	Performed correctly IVLeopold Maneuver		
13.	Correctly determined the fetal position		
14.	Correctly determined the fetal presentation		
15.	Correctly determined the fetal atitude / orientation		
16.	Correctly determined the level of engagement of the presented part		
17.	Communicated examination findings to the patient and provided any explanations required by patient during the examination.		
18.	Greeted the patient.		
19.	Threw used disposable gloves in the box for used sanitary materials.		
20.	Performed hand hygiene. Washed hands with soap and water and wiped with a clean towel.		

Total score, points	
Total score, %	
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Student/rezident _____ Group _____

Teacher 1 _____ Signature _____

Teacher 2 _____ Signature_____

5. FETAL HEART RATE AUSCULTATION

Purpose: Clinical method for assessing the fetal intrauterine status

Material required:

1. Water, soap, clean towel
2. A light source
3. Consultation couch with screen or curtain
4. Disposable gloves
5. Obstetrical Pinard stethoscope

Equipment: Low-fidelity mannequin (task trainer) to simulate the birth and Leopold palpation

Technique and tips:

1. Ensure a private space to preserve patient confidentiality.
2. Introduce yourself, inform and explain the procedure to the patient and obtain maternal consent.
3. Perform hand hygiene. Wash your hands with soap and water and wipe with a clean towel.
4. Use disposable gloves.
5. Place woman in dorsal recumbent position, supine with knees flexed to relax abdominal muscles. Place a small pillow under the head for comfort.
6. Provide any explanations required by the patient during the examination.
7. Identify the maximum outbreak of auscultation according to the presented part.
8. Fix the obstetrical stethoscope on the pregnant woman abdomen.
9. Take your hand off the stethoscope not to influence hearing the FHR.
10. Simultaneously, palpate the woman's radial pulse, to differentiate the FHR from other uterine or aortic murmurs (they are synchronic with woman's pulse).
11. Determine the FHR intensity, rate and regularity. Communicate findings to the patient.
12. Ask the patient to get up and get dressed. Greet the patient.
13. Perform hand hygiene. Wash your hands with soap and water and wipe with a clean towel. Throw the disposable gloves in the box for used sanitary materials, if you used them.

Interpretation. The normal fetal heart rate varies between 110 and 160 beats per minute.Maximum auscultation area of FHR depends on the fetal presentation and degree of engagement (Figure 9). In cephalic presentation, in addiction of fetus position, the FHR is listened in the subombilical area, on an imaginary line between the corresponding iliac spina (left or right) to the umbilicus. In breech presentation, the FHR is listened above the umbilicus, on the right or left side of the midline. In transverse presentation the FHR is listened in the paraombilical area, to the left or right in addiction to fetus position.

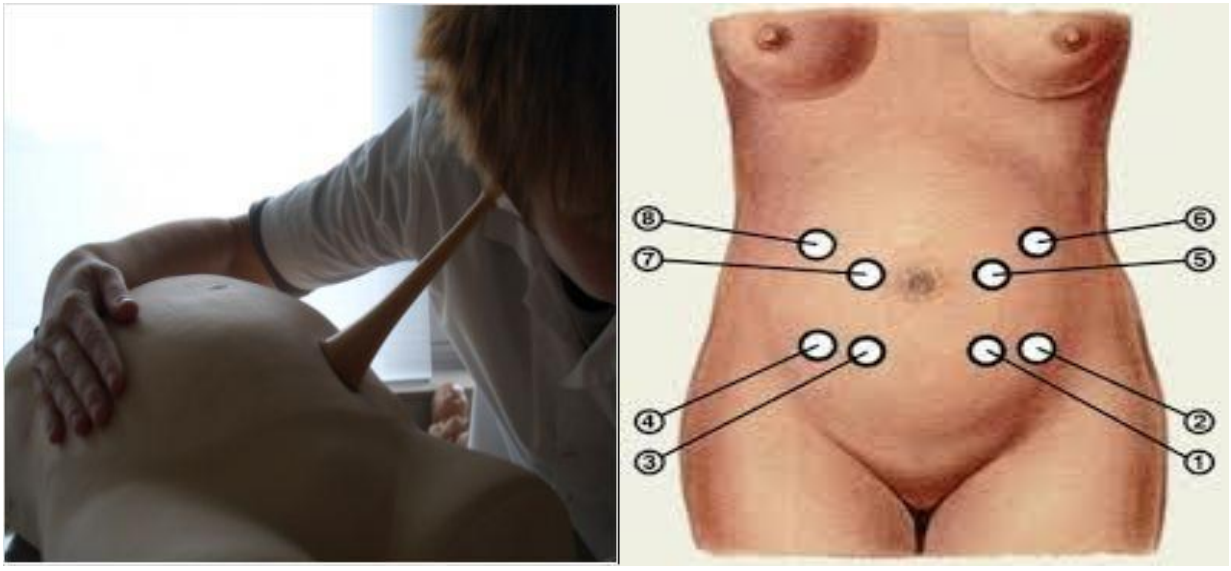

Figure 9. Fetal heart rate auscultation.Outbreaks of auscultation: 1-OISA; 2-OISP; 3-OIDA; 4-OIDP; 5-SISA; 6-SISP; 7-SIDA; 8-SIDP.*http://www.medskills.eu; http://intranet.tdmu.edu.ua*

	EVALUATION CHECKLIST 5.FETAL HEART RATE AUSCULTATION	Done correctly 1 p	Not done/ Done incorrectly 0p
1.	Ensured a private space to preserve patient confidentiality.		
2.	Introduced his (her) self, informed and explained the procedure to the patient and obtained maternal consent.		
3.	Performed hand hygiene. Washed his/her hands with soap and water and wiped with a clean towel.		
4.	Used disposable gloves.		
5.	Ensured correct position of the woman in dorsal recumbent position, supine with knees flexed to relax abdominal muscles.		
6.	Provided any explanations required by the patient during the examination		
7.	Identified the maximum outbreak of auscultation according to the presented part.		
8.	Correctly fixed the stethoscope on woman's abdomen.		
9.	Took the hand off the stethoscope not to influence hearing the FHR.		
10.	Simultaneously palpated the woman's pulse on radial artery.		
11.	Correctly determined the FHR intensity, rate and regularity.		
12.	Communicated examination findings to the patient.		
13.	Greeted the patient.		
14.	Threw used disposable gloves in the box for used sanitary materials.		
15.	Performed hand hygiene. Washed hands with soap and water and wiped with a clean towel.		

Total score, points	
Total score, %	
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Student/rezident _____ Group _____

Teacher 1 _____ Signature _____

Teacher 2 _____ Signature_____

6. SPECULUM EXAM OF THE CERVIX AND VAGINA

Speculum exam is always performed at the first antenatal visit. On subsequent visits this examination is performed only for strictly indications: investigating vaginal secretions or premature rupture of the amniotic membranes.

Purpose of the vaginal exam in early pregnancy:

- first trimester pregnancy diagnosis
- determination of the gestational age
- examination of the cervix
- genital tract anomalies detection

Purpose of the vaginal exam in late pregnancy:

- diagnosis of preterm labor or rupture of amniotic membranes
- determine the changes of cervix and cervical dilatation
- identification of the presented part

Material required:

1. Water, soap, clean towel
2. A light source
3. Consultation couch with screen or curtain
4. Sterile disposable gloves
5. Cusco vaginal speculum
6. Kristeller or Sims vaginal valve (figure 10)

Equipment: Low-fidelity mannequin (task trainer) to simulate the birth and low-fidelity mannequin (task trainer) for gynecological examination

Figure 10. A. Kristeller or Sims vaginal valve B. Cusco vaginal speculum

https://www.google.md/search?q=Valva+Kristeller&espv

Technique and tips for vaginal speculum exam:

1. Ensure a private space to preserve patient confidentiality.
2. Introduce yourself, inform and explain the procedure to the patient and obtain maternal consent.
3. Perform hand hygiene. Wash your hands with soap and water and wipe with a clean towel.

4. Use sterile disposable gloves.
5. Instruct woman to empty her bladder first.
6. Place the woman in lithotomic position.
7. Cover the patient's abdomen from the mid to the knees, keeping eye contact with the patient.
8. Assured and centered a light source

8. **Cusco speculum exam technique:**

- hold the speculum in an oblique position (45 °) with one hand, while with the other hand remove labia and carefully insert the speculum into the vagina closed, avoiding the urethra and clitoris
- rotate the speculum and open the two blades to view the cervix (Figure 11)
- close partially the speculum and in an oblique position extract gently from the vagina

9. Identify and examine the cervix
10. While extracting the speculum/ valves examine the vaginal walls
11. Extract the speculum or valves from the vagina and dip them in a disinfectant solution
15. Ask the patient to get up and get dressed. Greet the patient.
16. Throw the disposable gloves in the box for used sanitary materials.
17. Perform hand hygiene. Wash your hands with soap and water and wipe with a clean towel.

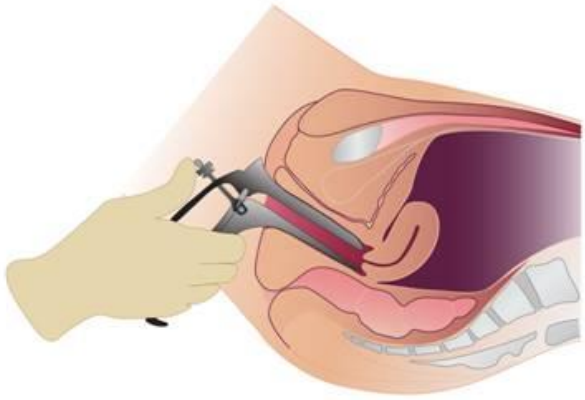

Figura 11. Cusco speculum cervix exam *https://www.google.md*

	EVALUATION CHECKLIST: 6.SPECULUM EXAM OF THE CERVIX AND VAGINA	Done correctly 1 p	Not done/ Done incorrectly 0 p
1.	Ensured a private space to preserve patient confidentiality.		
2.	Introduced his(her)self, informed and explained the procedure to the patient and obtained maternal consent.		
3.	Performed hand hygiene. Washed his/her hands with soap and water and wiped with a clean towel.		
4.	Used sterile disposable gloves.		
5.	Asked the woman to empty her bladder.		
6.	Ensured correct position of the woman in lithotomy position.		
7.	Covered the patient's abdomen from the mid to the knees, keeping eye contact with the patient.		
8.	Assured and centered a light source.		
9.	Maintained the Cusco speculum in an oblique position at an angle of 45 °		
10.	Correctly inserted the closed speculum into the vagina		
11.	The speculum was rotated correctly after inserting it in the vagina		
12.	Carefully opened the speculum and identified the cervix		
13.	Secured the speculum in open position using the padlock		
14.	Examined the cervix		
15.	Examined the vaginal walls while extracting the speculum		
16.	Correctly extracted the speculum (in closed position)		
17.	Communicated examination findings to the patient and provided any explanations required by patient during the examination.		
18.	Asked the patient to get up and get dressed. Greeted the patient.		
19.	Threw used disposable gloves in the box for used sanitary materials.		
20.	Performed hand hygiene. Washed hands with soap and water and wiped with a clean towel.		

Total score, points	
Total score, %	
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Student/rezident _____ Group _____

Teacher 1 _____ Signature _____

Teacher 2 _____ Signature_____

7. BIMANUAL VAGINAL EXAM

Purpose: To assess the pelvic organs status

Material required:

1. Water, soap, clean towel
2. A light source
3. Consultation couch with screen or curtain
4. Sterile disposable gloves
5. Lubrificant

Equipment: low-fidelity mannequin (task trainer) for gynecological examination

Technique and tips for bimanual vaginal exam:

1. Ensure a private space to preserve patient confidentiality.
2. Introduce yourself, inform and explain each step of the procedure to the patient in an appropriate language.
3. Ask the anamnesis to rule out the relevant allergies at iodine, latex, etc.
4. Ask the patient's permission to perform the exam and get the patient's consent (register verbal consent or obtain the patient's written consent for examination).
5. Offer the patient the presence of an attendant ("chaperones") during the examination. If the patient refuses the presence of a companion, register the refusal.
6. Make sure you have available a centered bright light source.
7. Perform hand hygiene. Wash your hands with soap and water and wipe with a clean towel.
8. Use sterile disposable gloves.
9. Instruct woman to empty her bladder first.
10. Place the woman in supine position or gynecological position/ lithotomic position.
11. Cover the patient's abdomen from the mid to the knees so as to be visible only perineum, keeping, however, eye contact with the patient.
12. Use gel or water to lubricate the examinating hand’s fingers, as required.
13. Removing gently the labia, place the medius finger of the examinating hand on the posterior commissure of the vulva and gently press to highlight the vaginal orifice.
14. Insert the medius and then the index into the vagina, following the posterior vaginal wall down and back to the posterior fornix until it reaches the cervix.
15. Palpate the cervix and the cervical canal orifice. Grip the cervix between the fingers and appreciate it’s size, shape and consistency.
16. Gently mobilize lateral the cervix and appreciate it’s sensibility to mobilization.
17. Rotate fingers horizontally at an angle of 90 ° and place them under the cervix to support the uterus.

18. Put your other hand on the abdomen, above the pubic symphysis and gently push to identify bottom of the uterus.
19. Palpate the uterus between the two hands (figure 11).
20. Appreciate:
    - the position of the uterus,
    - size, shape and composition,
    - contractility,
    - mobility,
    - sensitivity

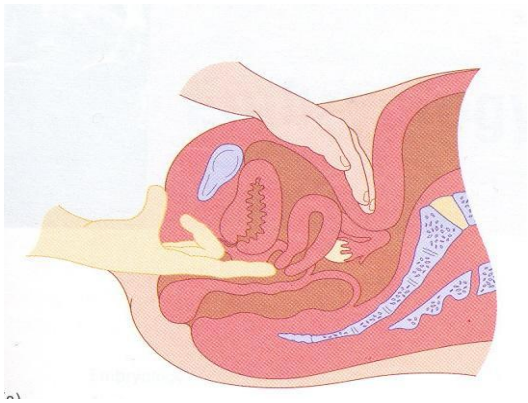

Figure 11. Bimanual vaginal exam
http://www.intranet.tdmu.edu.ua

21. Place the fingers in the lateral fornix comprising the cervix between them. Gently mobilize the cervix to the lateral sides and check the uterine sensitivity at mobilization. (Figure 12).

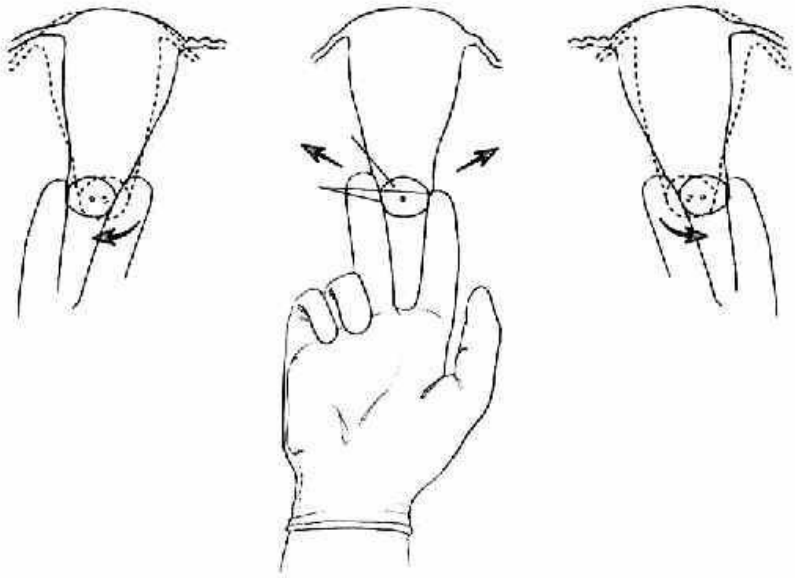

Figure 12. Checking the uterine sensitivity at mobilization.
http://www.romania.jsi.com/Docs/ob-gyn_video_users_guide_rom.pdf

22. Using both hands, orient your fingers to the lateral fornix, palpate the adnexial areas and vaginal fornix (figure 13).
23. At the end of the exam, easily retract the fingers from the vagina and examine the gloves to assess the secretions.
24. Provide any explanations required by the patient during the examination.
25. Ask the patient to get up and get dressed. Greet the patient.
26. Throw the disposable gloves in the box for used sanitary materials.
27. Perform hand hygiene. Wash your hands with soap and water and wipe with a clean towel.

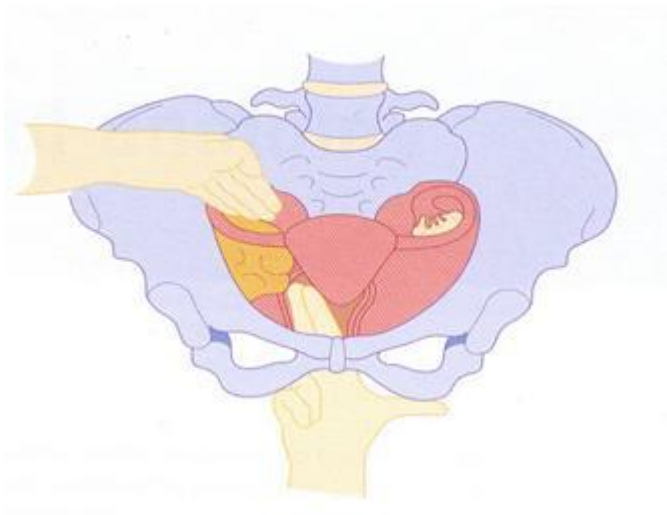

Figure 13. Adnexal areas palpation. Laughton A. The Gynecological examination. *http://slideplayer.us/slide/800613/*

	EVALUATION CHECKLIST 7.PERFORMING BIMANUAL VAGINAL EXAMINATION	Done correctly 1p	Not done/ done incorrectly 0 p
1.	Ensured a private space to preserve patient confidentiality.		
2.	Introduced him (her)self, informed and explained each step of the procedure to the patient in an appropriate language.		
3.	Asked the anamnesis to rule out the relevant allergies at iodine, latex, etc.		
4.	Asked the patient's permission to perform the exam and got the patient's consent (register verbal consent or obtain the patient's written consent for examination).		
5.	Offered to the patient the presence of an attendant ("chaperones") during the examination. If the patient refuses the presence of a companion, register the refusal.		
6.	Performed hand hygiene. Washed his/her hands with soap and water and wiped with a clean towel.		
7.	Used sterile disposable gloves.		
8.	Asked the patient to empty her bladder first.		
9.	Places the woman in gynecological position.		
10.	Covered the patient's abdomen from the mid to the knees, keeping eye contact with the patient.		
11.	Applied lubricant on the fingers.		
12.	Correctly inserted the fingers into the vagina.		
13.	Palpated the cervix and it's orifice.		
14.	Correctly placed the other hand on the woman's abdomen.		
15.	Delimited and palpated the uterus.		
16.	Appreciated - the position of the uterus, - size, - shape and composition, - contractility, - mobility, - sensitivity		
17.	Palpated the right annexes		
18.	Palpated the left annexes		
19.	Palpated the vaginal fornixes		
20.	Distinguished the specific signs of a pregnant uterus.		
21.	Communicated examination findings to the patient and provided any explanations required by patient during the examination.		
22.	Asked the patient to get up and get dressed.Greeted the patient.		
23.	Threw used disposable gloves in the box for used sanitary materials.		
24.	Performed hand hygiene. Washed hands with soap and water and wiped with a clean towel.		

Total score, points	
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Student/rezident _____ Group _____
Teacher 1 _____ Signature _____
Teacher 2 _____ Signature_____

8. DELIVERY MANEUVERS IN OCCIPITAL PRESENTATION (FETAL EXPULSION)

Purpose: To assist the delivery.

Material required:

1. Water, soap, clean towel
2. Obstetrical couch
3. Sterile disposable gloves
4. Porttampon tool (fenestrated forceps or Bozeman uterine forceps)
5. Sterile fields
6. Sterile cotton/ wadding tampons
7. A bowl with antiseptic solution
8. Kit for clamping the umbilical cord (2 clamps, Mayo scissors)

Equipment: Low-fidelity mannequin (task trainer) for birth simulation

Technique and tips:

1. Introduce yourself, ask the patient's permission to perform the birth assistance maneuvers and explain to the patient what these maneuvers are.
2. Place the woman in gynecological position / lithotomic position on the obstetrical couch.
3. Perform hand hygiene. Wash your hands with soap and water and wipe with a clean towel.
4. Empty bladder.
5. Place the sterile fields.
6. Prepare the staff for assisting the delivery: clothe the scrubs, sterile disposable gloves.
7. When the vulvar opening is expanded by the fetal head (the vulvovaginal opening of 5 cm) initiated the Ritgen maneuver.
8. Grib the fetal head with one hand (left) between the index and the other fingers and with the palm exert a moderate pressure down on the occiput, in order to maintain the cephalic extremity flexion and to modulate the deflection.
9. With the other hand (right) through the sterile field exerts a gentle pressure on the posterior perineum, protecting it. Let the perineal teguments to slide off the fetal face (Rirgen inverted maneuver - Figure 13).

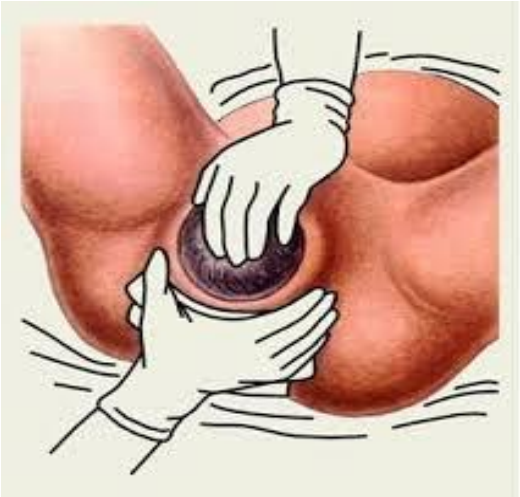

Figure 13. Delivery assistance in occipital presentation.*https://www.intranet.tdmu.edu.ua*

10. Check if there is a umbilical cord circular immediately after the release of the fetal head (figure 14). If there is one and ist's lax then roll it over the fetal head. If it's fixed (tight) then clamp and cut the cord between the clamps.

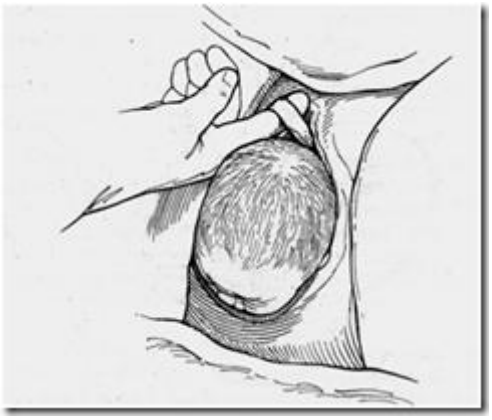

Figure 14. Checking the umbilical cord circular.
https://www.google.md/search?q=head+delivery+photos&biw

11. Place both's hands palmar face on the parietal regions of the fetal skull, exert a gentle and steady traction downward on the skull (figure 15). This way the anterior shoulder is brought under the symphysis. Release the anterior shoulder. Exert the traction only in the direction of the longitudinal axis of the fetal spine but not oblique, to avoid the brachial plexus lesions (figure 16).

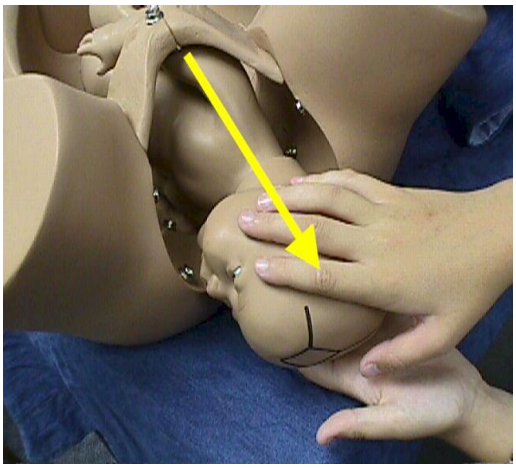

Figure 15. Correct axial traction.

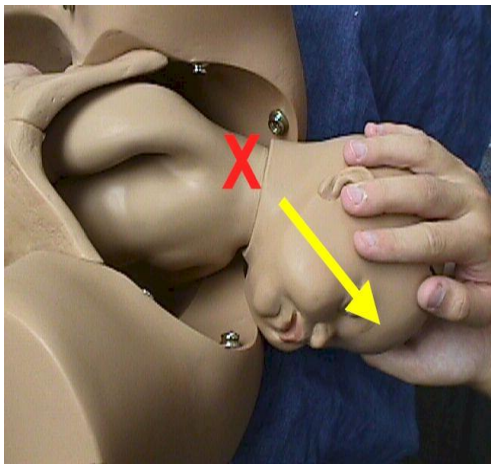

Figura 16. Incorrect traction.

www.osceskills.com

12. Release the posterior shoulder by gentle upward traction of the fetal skull.
13. By moderate traction easily release the rest of the fetal body.
14. Place the newborn on the mother's abdoment, and dry the newborn immediately after birth with a prehited diaper
15. Wrapp the newborn in another dry and warm diaper
16. Check vital signs of the newborn
17. If normal, keep the newborn on the mother's abdoment, clamp the umbilical cord and cut it between the clamps at 4-5 cm of fetal abdomen after 1 minute or after pulsations of ombilical vessels stop.
18. Provide any explanations required by the patient.
19. Throw the disposable gloves in the box for used sanitary materials.
20. Perform hand hygiene. Wash your hands with soap and water and wipe with a clean towel.

	EVALUATION CHECKLIST 8.DELIVERY MANEUVERS IN OCCIPITAL PRESENTATION (FETAL EXPULSION)	Done correctly 1p	Not done/ done incorrectly 0 p
1.	Introduced him(her)self, asked the patient's permission to perform the birth assistance maneuvers and explained to the patient what this maneuvers are.		
2.	Correctly placed the woman in gynecological position / lithotomic position on the obstetrical couch.		
3.	Performed hand hygiene. Washed his hands with soap and water and wiped with a clean towel.		
4.	Empty bladder.		
	Prepared the staff for assisting the delivery: clothe the scrubs, sterile disposable gloves.		
5.	Placed the sterile fields.		
6.	Clothed the scrubs, sterile disposable gloves.		
	Initiated the Ritgen maneuver at the required time of delivery (the vulvovaginal opening of 5 cm).		
7.	Correctly placed the first hand on fetal's skull in order to maintain the cephalic extremity flexion and to modulate the deflection.		
8.	Correctly placed the other hand (right) through the sterile field, on the posterior perineum, protecting it.		
9.	Favored the perineal teguments to slide off the fetal face.		
10.	Checked if there is a umbilical cord circular immediately after the delivery of the fetal head.		
11.	Correctly placed both's hands palmar face on the parietal regions of the fetal skull.		
12.	Correcly exerted the posterior axial traction of the fetal skull, in order to bring the anterior shoulder under the symphyzis, and released the anterior shoulder.		
13.	Released the posterior shoulder by gentle upward traction of the fetal skull.		
14.	Easily released the rest of the fetal body by moderate traction.		
15.	Placed the newborn on the mother's abdoment, and dried the newborn immediately after birth with a prehited diaper		
16.	Wrapped the newborn in another dry and warm diaper		
17.	If normal, kept the newborn on the mother's abdoment, and correctly clamped the umbilical cord and cutted it between the clamps.		
18.	Provided all the explanations required by the patient.		
19.	Threw the disposable gloves in the box for used sanitary materials.		
20.	Performed hand hygiene. Washed his hands with soap and water and wiped with a clean towel.		

Total score, points	
Total score, %	
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Student/rezident _____ Group _____
Teacher 1 _____ Signature _____
Teacher 2 _____ Signature_____

9. ACTIVE MANAGEMENT OF THIRD PERIOD OF LABOR

Purpose: to facilitate the expulsion of placenta, to prevent the uterine atony and to decrease the postpartum hemorrhage risk. Active management of the third period of labor is initiated after childbirth and after the doctor palpated parturient's abdomen to exclude the presence of another child.

Material required:

1. Water, soap, clean towel
2. Obstetrical couch
3. Sterile disposable gloves
4. Fenestrated forceps or Bozeman uterine forceps
5. Sterile fields
6. A bowl with antiseptic solution
7. Sterile cotton/ wadding tampons

Equipment: Low-fidelity mannequin (task trainer) for birth simulation

Technique and tips:

1. Introduce yourself, ask the patient's permission to perform the expulsion of placenta maneuvers and explain to the patient what these maneuvers are.
2. Perform hand hygiene. Wash your hands with soap and water and wipe with a clean towel.
3. Use sterile disposable gloves.
4. Place the sterile fields under the parturient's buttocks and on the abdomen.
5. Before starting the active management of the third period of birth, palpate the parturient's abdomen and exclude the presence of a second fetus.
6. Administrate 10 UI Oxytocin solution intramuscular immediately after birth, preferably within the first minute.
7. Wait 1-3 minutes after childbirth and clamp the umbilical cord, near the perineum (figure 17).

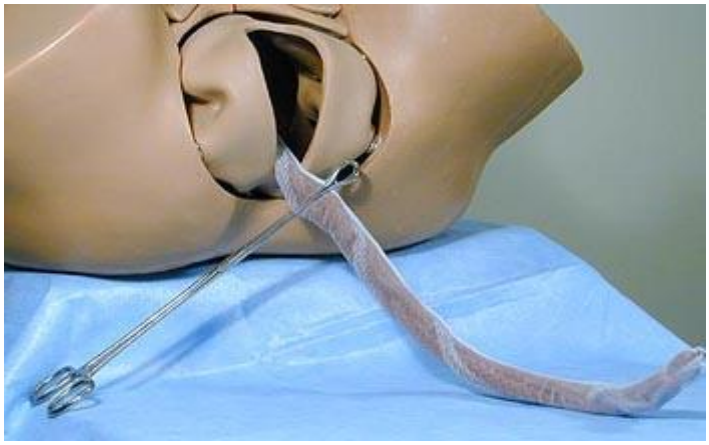

Figure 17. Applying fenestrated forceps near the perineum.*www.osceskills.com*

8. Cut the umbilical cord with sterile scissors.
9. Hold the cord with your right hand.

10. Place your left hand on the mother's lower abdomen just above the pubic bone to assess uterine contractions (Figure 18). Do not massage the uterus before the expulsion of placenta!!!

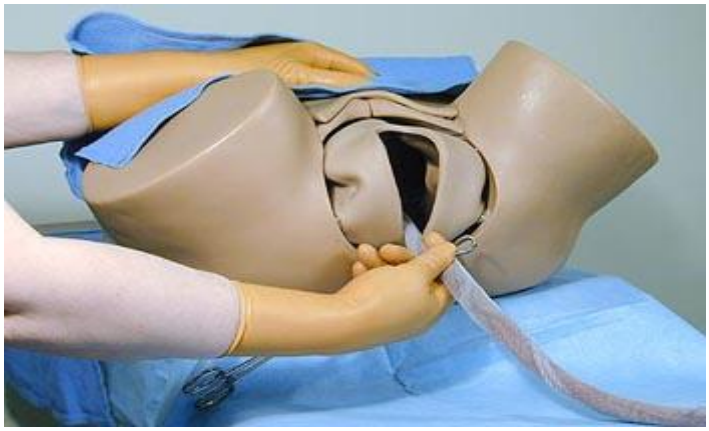

Figure 18. Controlled cord traction.*www.osceskills.com*

11. Keep this position, exerting a slight tension on the cord and wait for a strong uterine contraction. It usually takes 2-3 minutes.
12. During uterine contractions put your hand on the mother's abdomen above the pubic bone, applie pressure on the uterus in the upper direction, towards the head of parturient (Figure 19).

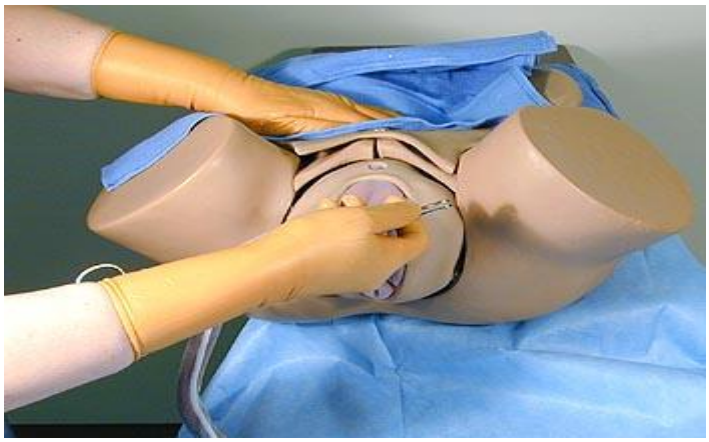

Figure 19. Exert uterine pressure. *www.osceskills.com*

13. Simultaneously with uterine pressure, exert a constant gentle cord traction, pulling it down towards the birth canal axis (Figure 20, 21)

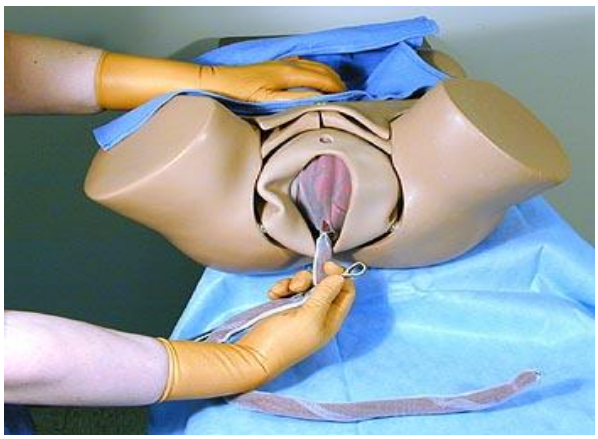
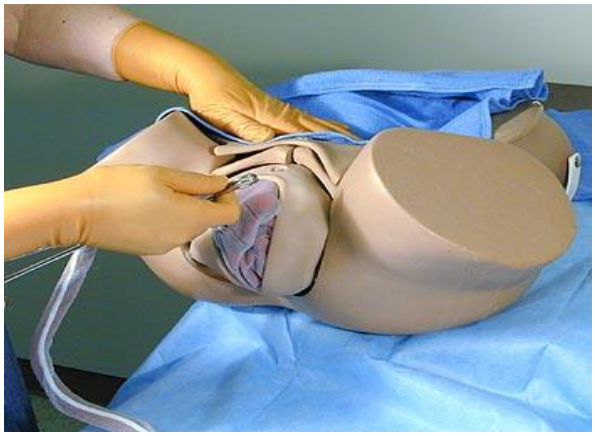

Figure 20, 21. Controlled cord traction. *www.osceskills.com*

14. Gently hold the cord between contractions.
15. The next uterine contraction, repeat controlled cord traction simultaneously with uterine pressure.
16. If the placenta does not descend during 30-40 seconds of controlled cord traction or if no signs of expulsion the placenta, stop procedure.
17. By the time the placenta delivery hold it with both hands (Figure 22).

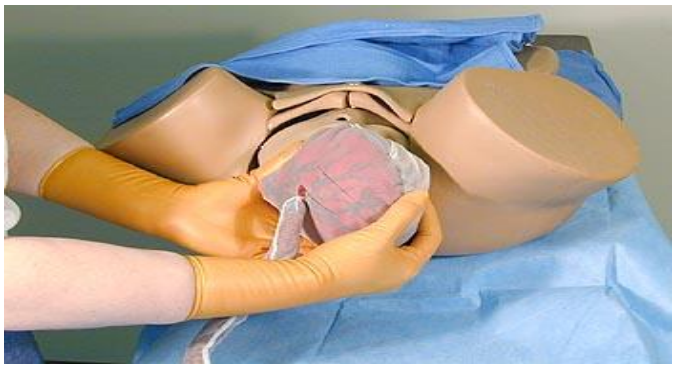

Figure 22. Placenta delivery. *www.osceskills.com*

18. If the membranes are not born spontaneously, rotate the placenta and membranes as a rope, moving them up and down to separate the membranes of the uterus wall, without pulling them (Figure 23)

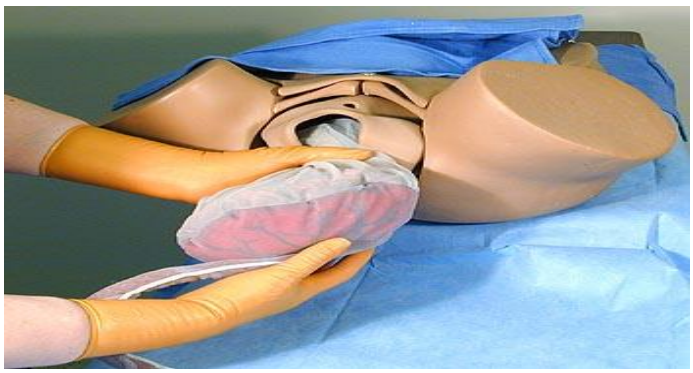

Figure 23. Amniotic membranes delivery. www.osceskills.com

19. Pull slowly to finish placenta and membranes delivery (Figure 24).

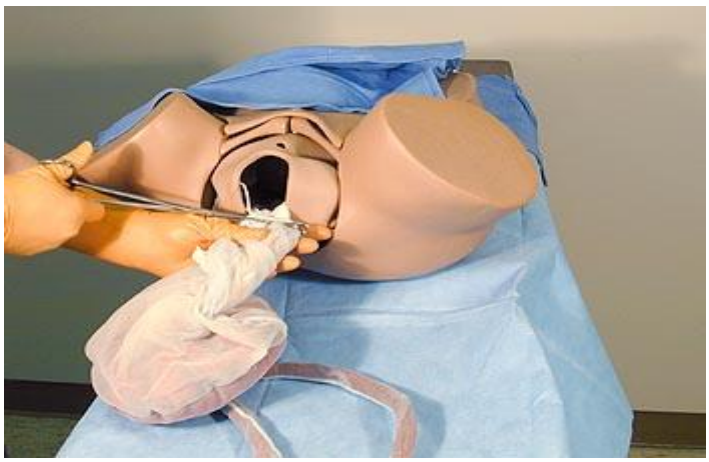

Figure 24. Membranes extraction with the fenestrated forceps.*www.osceskills.com*

20. If the membranes are broken, examine the vagina and cervix. Use a fenestrated forceps to remove the remaining portions of membranes.
21. Immediately after the placenta and membranes are delivered, massage the uterus transabdominally to stimulate the contractions and to remove blood clots. Make sure there is no excessive bleeding (Figure 25)

Figure 25. Transabdominal uterine massage. *www.osceskills.com*

22. Check the integrity of placenta.
23. Keep maternal placenta surface facing up, and make sure all the cotyledons are present and match to each other (Figure 26).

Figure 26. Checking the integrity of the placenta. *www.osceskills.com*

24. Keep cord with one hand and allow the placenta and membranes to hang down.
25. Place the other hand inside the membranes, release with your fingers and check the integrity of membranes.
26. Check the normal insertion of the umbilical cord at the placenta (Figure 27)

Figure 27. Check the cord insertion. *www.osceskills.com*

27. Carefully separate the labia, examine the vagina and perineum to exclude the presence of lacerations.
28. Disinfect vulva and perineum.
29. Appreciate the volume of hemorrhage.
30. Throw the disposable gloves in the box for used sanitary materials.
31. Perform hand hygiene. Wash your hands with soap and water and wipe with a clean towel.
32. Document data according to protocol

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	EVALUATION CHECKLIST 9.ACTIVE MANAGEMENT OF THIRD PERIOD OF LABOR	Done correctly 1p	Not done/ done incorrectly 0 p
1.	Introduced him(her)self, asked the patient's permission to perform the expulsion of placenta maneuvers and explained to the patient what this maneuvers are.		
2.	Performed hand hygiene. Washed his/her hands with soap and water and wiped with a clean towel.		
3.	Used sterile disposable gloves.		
4.	Placed the sterile fields under the parturient's buttocks and on the abdomen.		
5.	Palpated the parturient's abdomen and excluded the presence of a second fetus.		
6.	Administrated 10 UI Oxytocin solution intramuscular immediately after birth, preferably within the first minute.		
7.	Clamped and cutted the umbilical cord, at 1-3 minutes after delivery.		
8.	Mantained with the right hand the umbilical cord and placed the left hand on the mother's lower abdomen just above the pubic bone to assess uterine contractions.		
9.	Mantained this position, exerting a slight tension on the cord and waiting for a strong uterine contraction.		
10.	During uterine contraction, exerted a constant gentle cord traction, pulling it down towards the birth canal axis, simultaneously with uterine cont-pressure, with the hand on the mother's abdomen above the pubic bone, applied pressure on the uterus in the upper direction, towards the head of parturient.		
11.	Repeated the controlled cord traction simultaneously with uterine cont-pressure at the next uterine contraction.		
12.	Stopped the procedure of controlled cord traction if the placenta does not descends during 30-40 seconds.		
13.	Correctly mantained the placenta with both hands.		
14.	Rotated the placenta and membranes as a rope, moving them up and down to separate the membranes of the uterus wall, without pulling them.		
15.	Massaged the uterus transabdominally immediately after the placenta and membranes are delivered, to stimulate the contractions and to remove blood clots.		
16.	Examined the maternal placenta surface and checked the cotyledons integrity.		
17.	Checked the membranes integrity.		
18.	Checked the normal insertion of the umbilical cord at the placenta.		
19.	Examined the vagina and perineum to exclude the presence of lacerations.		

20.	Appreciated the volume of hemorrhage.		
21.	Threw the disposable gloves in the box for used sanitary materials.		
22.	Performed hand hygiene. Washed his/her hands with soap and water and wiped with a clean towel.		
23.	Provided all the explanations required by the patient.		

Total score, points	
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Student/rezident _____ Group _____
Teacher 1 _____ Signature _____
Teacher 2 _____ Signature_____

10. MANUAL REMOVAL OF PLACENTA

Purpose: The separation of the placenta from the uterine wall and its extraction.

Indications:

- Active bleeding over 500 ml before the expulsion of placenta
- The lack of expulsion of the placenta 30 minutes after delivery of the fetus.

Material required:

1. Water, soap, clean towel
2. Obstetrical couch
3. Sterile disposable gloves
4. Sterile fields
5. A bowl with antiseptic solution
6. Sterile cotton/ wadding tampons
7. Bozeman fenestrated uterine forceps

Equipment: Low-fidelity mannequin (task trainer) for birth simulation

Technique and tips for manual removal of placenta:

1. Introduce yourself, ask the patient's permission to perform the manual removal of placenta maneuvers and explain to the patient what these maneuvers are.
2. Place the woman in gynecological position / lithotomic position on the obstetrical couch.
3. Ensure the bladder evacuation: place an urinary catheter.
4. Ensure adequate analgesia (general, spinal, epidural).
5. Perform hand hygiene. Wash your hands with soap and water and wipe with a clean towel.
6. Process hands with disinfectant.
7. Clothe a sterile scrub and use sterile disposable gloves.
8. Process genital organs with disinfectant.
9. Place sterile fields on the parturient's abdomen.
10. Place the dominant hand (right) in a cone-shape, by holding the top of the fingers and the thumb together.
11. Insert right hand into the vagina, cervix and uterine cavity, following the direction of the cord (Figure 28).
12. Place your left hand on parturient's abdomen, grip the uterus through the abdominal wall. The hand must contain the bottom of the uterus, the thumb should be positioned on the pubic symphysis (Figure 29).
13. Push the uterus downward and continue to keep in a stable position with your hand.
14. If there is a contraction ring at the level of the lower uterine segment, gently dilate the cervix until the hand can reach the bottom of the uterus.

Figure 28. Insertion of the right hand into the vagina, following the direction of the cord.*http://www.healthphone.org/*

15. Move your fingers laterally to identify the edge of the placenta. Identify cleavage space between the placenta and the uterine wall. Do not force the fingers into the uterine wall to prevent its rupture.
16. Holding fingers together, insert your hand between the placenta and the uterine wall with the palm geared towards the placenta.
17. With gentle lateral movements of the fingers and hand, penetrate between the placenta and the uterine wall and separate it until the whole placenta is off.

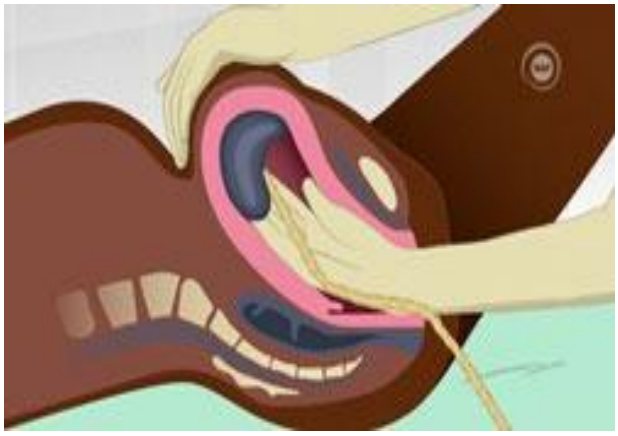

Figure 29. Mantaining the uterine bottom during the manual removal of placenta. *http://www.healthphone.org/*

18. When the placenta is fully delivered, pull it gently through the cervix, twisting it slightly before reaching the vagina to ensure the deliver of the amniotic memebranes. Extract the placenta from the uterine cavity.
19. Grip the twisted membranes with fingers or a fenestrated forceps, to extract them from the uterus and vagina without breaking them.
20. Explore again the uterine cavity to identify and remove blood clots, membranes or remaining placental tissue.
21. Start from the lateral side of the uterus and perform the same movements for checking interior uterine wall from side to side and top down.

22. Stop the procedure in case of placenta accreta.
23. Perform transabdominal uterine massage to stimulate uterine contractions.
24. Check the placenta and membranes integrity.
25. Initiate the intravenous administration of 20 IU of oxytocin in 500 ml 0.9% NaCl or Ringer's lactate to maintain uterine contractions.
26. Administer a prophylactic dose of antibiotics: ampicillin 2g and metronidazole 500 mg intravenous or cefazolin 1 g and intravenous metronidazole 500 mg.
27. Appreciate the volume of hemorrhage.
28. Throw the disposable gloves in the box for used sanitary materials.
29. Perform hand hygiene. Wash your hands with soap and water and wipe with a clean towel.

	EVALUATION CHECKLIST 10.MANUAL REMOVAL OF PLACENTA	Done correctly 1p	Not done/ done incorrectly 0 p
1.	Introduced him(her)self, asked the patient's permission to perform the manual removal of placenta maneuvers and explained to the patient what this maneuvers are. Obtained the patient's consent.		
2.	Ensured the bladder evacuation: placed a urinary catheter.		
3.	Ensured an adequate analgesia (general, spinal, epidural).		
4.	Performed hand hygiene. Washed his/her hands with soap and water and wiped with a clean towel.		
5.	Processed hands with disinfectant.		
6.	Used a sterile scrub and sterile disposable gloves.		
7.	Placed sterile fields on the parturient's abdomen.		
8.	Placed the dominant hand (right) in a cone-shape, by holding the top of the fingers and the thumb together.		
9.	Inserted the right hand into the vagina, cervix and uterine cavity, following the direction of the cord.		
10.	Placed his/her left hand on parturient's abdomen, griped the uterus through the abdominal wall and keeped it in a stable position.		
11.	Moved his/her fingers laterally to identify the edge of the placenta. Identified cleavage space between the placenta and the uterine wall.		
12.	Holding fingers together, inserted his/her hand between the placenta and the uterine wall with the palm geared towards the placenta.		
13.	Separated the placenta from the uterine wall with gentle lateral movements of the fingers and hand.		
14.	Extracted the placenta from the uterine cavity, when the placenta was fully delivered.		
15.	Explored again the uterine cavity to identify and remove blood clots, membranes or remaining placental tissue.		
16.	Stoped the procedure in case of placenta accreta.		
17.	Performed the transabdominal uterine massage to stimulate uterine contractions.		
18.	Checked the placenta and membranes integrity.		
19.	Initiated the intravenous administration of 20 IU of oxytocin in 500 ml 0.9% NaCl or Ringer's lactate to maintain uterine contractions.		
20.	Administered a prophylactic dose of antibiotics: ampicillin 2g and metronidazole 500 mg intravenous or cefazolin 1 g and intravenous metronidazole 500 mg.		
21.	Appreciated the volume of hemorrhage.		
22.	Threw the disposable gloves in the box for used sanitary materials.		
23.	Performed hand hygiene. Washed his/her hands with soap and water and wiped with a clean towel.		
24.	Provided all the explanations required by the patient.		

Total score, points	
Total score, %	
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Data	

Student/rezident _____ Group _____
Teacher 1 _____ Signature _____
Teacher 2 _____ Signature_____

11. COLLECTION OF VAGINAL SECRETIONS FOR STAINED BACTERIOSCOPIC EXAM. SAMPLING PROCEDURE.

Purpose: to determine the flora that "inhabits" the vagina, cervix and urethra of women and to detect vulvovaginal infections.

Material required:

1. Water, soap, clean towel
2. Sterile disposable gloves
3. A light source
4. Sterile unlubricated vaginal valves or speculum
5. Sterile wadding tampons on a port-tampon
6. Sterile absorbent pipettes
7. Sterile saline solution
8. Clean, defatted and dried glass slides

Equipment: low-fidelity mannequin (task trainer) for gynecological examination

Technique and tips:

1. Ensure a private space to preserve patient confidentiality.
2. Introduce yourself, inform and explain each step of the procedure to the patient in an appropriate language.
3. Ask the patient's permission to perform the exam and get the patient's consent (register verbal consent or obtain the patient's written consent for examination).
4. Offer the patient the presence of an attendant ("chaperones") during the examination. If the patient refuses the presence of a companion, register the refusal.
5. Make sure you have available a centered bright light source.
6. Perform hand hygiene. Wash your hands with soap and water and wipe with a clean towel.
7. Use sterile disposable gloves.
8. Place the woman in supine position or gynecological position/ lithotomic position.
9. Cover the patient's abdomen from the mid to the knees so as to be visible only perineum, keeping, however, eye contact with the patient.
10. Point out the vagina with the valves or speculum.
11. With a special sterile tampon for each locus, collect a small amount of secretions from the posterior vaginal fornix, cervical canal and the urethra (Figure 14).
12. Apply the secretions on special glass slides in a thin layer, separately for each locus.
13. Label the slides and send it to the lab.
14. The slides for microscopy will be colored Gram (for the assessment of vaginal flora) and Giemsa (for assessment of inflammatory reaction/ the cells).

15. Provide any explanations required by the patient during the examination.
16. Ask the patient to get up and get dressed. Greet the patient.
17. Throw the disposable gloves in the box for used sanitary materials.
18. Perform hand hygiene. Wash your hands with soap and water and wipe with a clean towel.

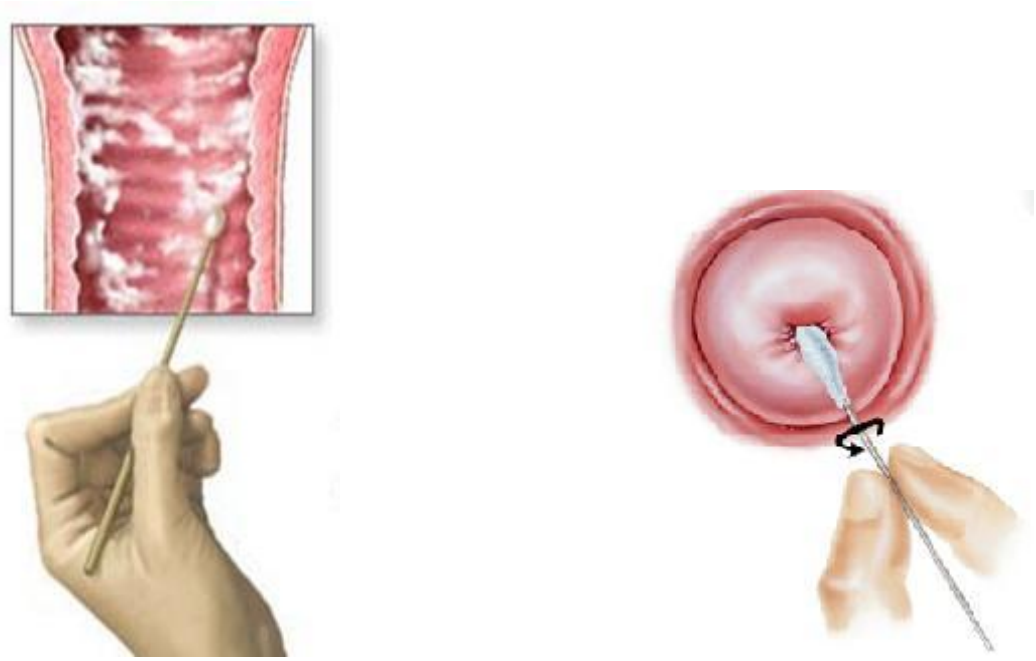

Figure 14. Collecting vaginal and cervical secretions for bacterioscopic exam.
www.genesiscares.wordpress.com

	EVALUATION CHECKLIST 11.COLLECTION OF VAGINAL SECRETIONS FOR STAINED BACTERIOSCOPIC EXAM. SAMPLING PROCEDURE	Done correctly 1p	Not done/ done incorrectly 0 p
1.	Ensured a private space to preserve patient confidentiality.		
2.	Introduced him (her)self, informed and explained each step of the procedure to the patient in an appropriate language.		
3.	Asked the anamnesis to rule out the relevant allergies at iodine, latex, etc.		
4.	Asked the patient's permission to perform the exam and got the patient's consent (registered verbal consent or obtained the patient's written consent for examination).		
5.	Offered to the patient the presence of an attendant ("chaperones") during the examination.		
6.	Assured a centered bright light source.		
7.	Performed hand hygiene. Washed his/her hands with soap and water and wiped with a clean towel.		
8.	Used disposable gloves.		
9.	Placed the woman in gynecological position.		
10.	Covered the patient's abdomen from the mid to the knees, keeping eye contact with the patient.		
11.	Pointed out the vagina with the valves or speculum.		
12.	With a special sterile tampon for each location, collected a small amount of secretions from the posterior vaginal fornix, cervical canal and the urethra.		
13.	Applied the secretions on special glass slides in a thin layer, separately for each of the collected location		
14.	Correctly labeled the slides and send it to the lab.		
15.	Provided any explanations required by the patient during the examination.		
16.	Asked the patient to get up and get dressed. Greeted the patient.		
17.	Threw the disposable gloves in the box for used sanitary materials.		
18.	Performed hand hygiene. Washed his/her hands with soap and water and wiped with a clean towel.		

Total score, points	
Total score, %	
Mark	
Data	

Student/rezident _____ Group _____
Teacher 1 _____ Signature _____
Teacher 2 _____ Signature_____

12. CONVENTIONAL PAP SMEAR. TECHNIQUE.

Purpose: to detect abnormal cervical cells.

Material required:

1. Water, soap, clean towel
2. Sterile vaginal valves or speculum
3. A light source
4. Sterile disposable gloves
5. Wood Ayres spatula (avoid metal spatulas) for vaginal and exocervical sampling
6. Small cylindrical brush with transverse equal bristles, for endocervical sampling
7. Glass slides with coarse extremities
8. Cytological fixative

Equipment: low-fidelity mannequin (task trainer) for gynecological examination.

Technique and tips:

1. Ensure a private space to preserve patient confidentiality.
2. Introduce yourself, inform and explain each step of the procedure to the patient in an appropriate language.
3. Ask the patient's permission to perform the exam and get the patient's consent (register verbal consent or obtain the patient's written consent for examination).
4. Offer the patient the presence of an attendant ("chaperones") during the examination. If the patient refuses the presence of a companion, register the refusal.
5. Prepare all necessary instrument and material
6. Make sure you have available a centered bright light source.
7. Perform hand hygiene. Wash your hands with soap and water and wipe with a clean towel.
8. Use sterile disposable gloves.
9. Place the woman in supine position or gynecological position/ lithotomic position.
10. Cover the patient's abdomen from the mid to the knees so as to be visible only perineum, keeping, however, eye contact with the patient.
11. Point out the vagina with the valves or speculum.
12. Remove any excess mucus or secretions from the cervix with a wadding tampon, without damaging the epithelium.
13. Apply Ayres spatula at the opening of the external cervical os and make a rasping rotating the spatula at 360 ° to harvest the cells of the ectocervix (Figure 15).

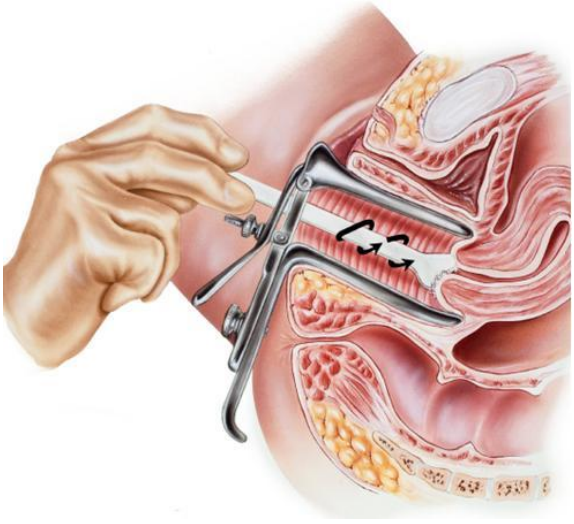

Figure 15. Collecting the cells of the ectocervical cells with the Ayres Spatula

https://www.google.md/search?q=pap+test&tbm

14. Spread the collected material from ectocervix on the slide by a sinuous movement of the spatula, from one end to the other without pressing too hard

Figure 16. Collecting the cells from the endocervix with the cylindrical brush
https://www.google.md/search?q=pap+test&tbm

15. Then insert the cylindrical brush in the cervical canal and rotate the brush 360° to collect the cells from the endocervix.
16. Rotate the endocervical brush onto the glass slide to ensure that its entire circumference is in contact with the surface of the slide.
17. Prepare slides for each area of collecting.
18. Spray fixative on the slides immediately to prevent cells dehydration, that begin to occur in15 seconds.
19. Provide any explanations required by the patient during the examination.
20. Ask the patient to get up and get dressed. Greet the patient.
21. Note at the slides ends the patient's name and the type of sampling (exocervix, endocervix).
22. Send slides to the lab.
23. Throw the disposable gloves in the box for used sanitary materials.
24. Perform hand hygiene. Wash your hands with soap and water and wipe with a clean towel.

	EVALUATION CHECKLIST 12.CONVENTIONAL PAP SMEAR. TECHNIQUE.	Done correctly 1p	Not done/ done incorrectly 0 p
1.	Ensured a private space to preserve patient confidentiality.		
2.	Introduced him(her)self, informed and explained each step of the procedure to the patient in an appropriate language.		
3.	Asked the patient's permission to perform the exam and got the patient's consent (registered verbal consent or obtained the patient's written consent for examination).		
4.	Offered to the patient the presence of an attendant ("chaperones") during the examination.		
5.	Assured a centered bright light source.		
6.	Prepared all necessary instrument and material		
7.	Performed hand hygiene. Washed his/her hands with soap and water and wiped with a clean towel.		
8.	Used disposable gloves.		
9.	Places the woman in gynecological position.		
10.	Covered the patient's abdomen from the mid to the knees, keeping eye contact with the patient.		
11.	Pointed out the vagina with the valves or speculum.		
12.	Removed any excess mucus or secretions from the cervix with a wadding tampon, without damaging the epithelium.		
13.	Applied Ayres spatula at the opening of the external cervical os and maked a rasping rotating movement at 360 ° to harvest the cells of the exocervix.		
14.	Spreaded the harvested material from ectocervix on the slide by a sinuous movement of the spatula, from one end to the other without pressing too hard.		
15.	Inserted the cylindrical brush in the cervical canal and rotated the brush 360° to harvest the cells from the endocervix.		
16.	Rotated the endocervical brush onto the glass slide to ensure that its entire circumference is in contact with the surface of the slide.		
17.	Prepared slides for each area of collecting.		
18.	Sprinkled fixative on the slides immediately to prevent cells dehydration.		
19.	Provided any explanations required by the patient during the examination.		
20.	Asked the patient to get up and get dressed. Greeted the patient.		
21.	Noted at the slides ends the patient's name and the type of sampling (ectocervix, endocervix).		
22.	Sent the slides to the lab.		
23.	Threw the disposable gloves in the box for used sanitary materials.		
24.	Performed hand hygiene. Washed his/her hands with soap and water and wiped with a clean towel.		

Total score, points	
Total score, %	
Mark	
Data	

Student/rezident _____ Group _____
Teacher 1 _____ Signature _____
Teacher 2 _____ Signature_____

13. LIQUID-BASED CERVICAL CYTOLOGY (PAP SMEAR). TECHNIQUE.

Purpose: to detect abnormal cervical cells.

Material required:

1. Water, soap, clean towel
2. Sterile vaginal valves or speculum
3. A light source
4. Sterile disposable gloves
5. Plastic brush with longitudinal unequal bristle „Cyto Brush”
6. Container with cytological fixative

Equipment: low-fidelity mannequin (task trainer) for gynecological examination.

Technique and tips:

1. Ensure a private space to preserve patient confidentiality.
2. Introduce yourself, inform and explain each step of the procedure to the patient in an appropriate language.
3. Ask the patient's permission to perform the exam and get the patient's consent (register verbal consent or obtain the patient's written consent for examination).
4. Offer the patient the presence of an attendant ("chaperones") during the examination. If the patient refuses the presence of a companion, register the refusal.
5. Make sure you have available a centered bright light source.
6. Prepare all necessary instruments and materials.
7. Perform hand hygiene. Wash your hands with soap and water and wipe with a clean towel.
8. Use sterile disposable gloves.
9. Place the woman in supine position or gynecological position/ lithotomic position.
10. Cover the patient's abdomen from the mid to the knees so as to be visible only perineum, keeping, however, eye contact with the patient.
11. Point out the vagina with the valves or speculum.
12. Remove any excess mucus or secretions from the cervix with a wadding tampon, without damaging the epithelium.
13. Insert the central part of the plastic brush "Cyto Brush" in the endocervical canal so that the shorter edges of it contact with the ectocervix.
14. With central part fixed, fully rotate the brush at 360 ° clockwise five times, being in intimate contact with the cervix (Figure 17).

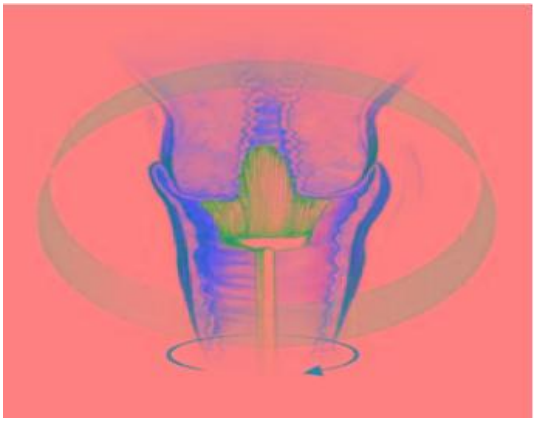

Figure 17. CollectingPap-smear in liquid medium
https://www.google.md/search?q=pap+test&tbm

15. Fix the sample immediately to avoid damage. In order to do this rinse off the brush into the container, pressing dynamic 10 times on its walls or bottom, remove the brush head which contains harvested material and place it in the container with liquid medium (Figure 18).

Figure 18. Container with liquid medium

https://www.google.md/search?q=pap+test&tbm

16. Cover the container with its lid, label it immediately (or before collecting the sample) and transport the container to the laboratory with the patient's accompanying sheet for processing.
17. Make sure that the sample is accompanied by patient's complete personal and clinical data: age, date of last menstrual period, date of collection, medical history, treatment, contraception, etc.
18. Provide any explanations required by the patient during the examination.
19. Ask the patient to get up and get dressed. Greet the patient.
20. Throw the disposable gloves in the box for used sanitary materials.
21. Perform hand hygiene. Wash your hands with soap and water and wipe with a clean towel.

	EVALUATION CHECKLIST 13.LIQUID-BASED CERVICAL CYTOLOGY (PAP SMEAR)	Done correctly 1p	Not done/ done incorrectly 0 p
1.	Ensured a private space to preserve patient confidentiality.		
2.	Introduced him(her)self, informed and explained each step of the procedure to the patient in an appropriate language.		
3.	Asked the patient's permission to perform the exam and got the patient's consent (registered verbal consent or obtained the patient's written consent for examination).		
4.	Offered to the patient the presence of an attendant ("chaperones") during the examination.		
5.	Assured a centered bright light source.		
6.	Prepared all necessary instruments and materials		
7.	Performed hand hygiene. Washed his/her hands with soap and water and wiped with a clean towel.		
8.	Used disposable gloves.		
9.	Placed the woman in gynecological position.		
10.	Covered the patient's abdomen from the mid to the knees, keeping eye contact with the patient.		
11.	Pointed out the vagina with the valves or speculum		
12.	Removed any excess mucus or secretions from the cervix with a wadding tampon, without damaging the epithelium.		
13.	Inserted the central part of the plastic brush "Cyto Brush" in the endocervical canal so that the shorter edges of it contact with the ectocervix.		
14.	With central part fixed, fully rotated the brush at 360 ° clockwise five times, being in intimate contact with the cervix.		
15.	Fixed the sample immediately to avoid damage. Rinsed off the brush into the container, pressing dynamic 10 times on its walls or bottom, removed the brush head which contains collected material and placed it in the container with liquid medium.		
16.	Covered the container with its lid.		
17.	Labeled it immediately and transported the container to the laboratory with the patient 's accompanying sheet for processing.		
18.	Assured that the sample is accompanied by patient's complete personal and clinical data: age, date of last menstrual period, date of collection, medical history, treatment, contraception, etc		
19.	Provided any explanations required by the patient during the examination.		
20.	Asked the patient to get up and get dressed. Greeted the patient.		
21.	Threw the disposable gloves in the box for used sanitary materials.		
22.	Performed hand hygiene. Washed his/her hands with soap and water and wiped with a clean towel.		

Total score, points	
Total score, %	
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Data	

Student/rezident _____ Group _____
Teacher 1 _____ Signature _____
Teacher 2 _____ Signature_____

14. PARACERVICAL BLOCK

Purpose: analgesia during gynecological procedures: abortion, uterine curettage, etc.

Material required:

1. Water, soap, clean towel;
2. Light source;
3. Sterile disposable gloves;
4. Sterile fields;
5. Bowl with antiseptic solution;
6. Sterile cotton swabs,
7. Vaginal speculum or valve,
8. Tenaculum to fix the cervix,
9. A long spinal needle (15 cm), 20-22 gauge,
10. Disposable syringe, 10 ml
11. Local anesthetic: 1% lidocaine solution or 2%, maximum 20 ml volume,
12. Resuscitation equipment and drugs for adverse reactions to anesthesia.

Equipment: Low fidelity mannequin (task trainer) for gynecological examination.

Technique and tips for hot chain assurance:

1. Introduce yourself, inform and explain to the patient about procedure of the cervical block, answer the patient's questions.
2. Evaluate history and exclude allergic reactions to local anesthetics, iodine, latex, etc.
3. Get patient consent to analgesia.
4. Place the patient in gynecological position (lithotomy).
5. Prepare the necessary materials and tools.
6. Wash hands with soap and water and wipe them with a clean towel.
7. Process hands with disinfectant.
8. Put on sterile disposable gloves.
9. Ask an assistant to guide light source to the perineum and vagina.
10. Insert vaginal speculum or vaginal valves and visualize the cervix.
11. Process cervix with antiseptic solution with circular motion from internal cervical os .
12. Inject 2.0 mL of local anesthetic into the cervix superficially at 12.00, which corresponds to the place of tenacullum placement for fixing the cervix.
13. Attach and secure anesthetized portion of the cervix (anterior labia at 12.00 with tenacullum).
14. Paracervical inject 2.5 ml of local anesthetic successively in 4 points: at 2.00, 4.00, 8.00 and 10.00 or 5 mL of local anesthetic in 2 points of the cervix, at 4.00 and 8.00 (Figure 37).
15. Withdraw before injection to exclude intravascular penetration of the needle.

16. Move progressively the needle from the surface (1 cm) to depth (3cm) and back to the superficial layers - injection by needle insertion and withdrawal.

17. Inspect the injection site to exclude bleeding.

18. The maximum dose of lidocaine should not exceed 4.5 mg / kg body weight.

19. Dispose gloves in the box for used sanitary materials.

20. Wash your hands with soap and water and dry them with a clean towel.

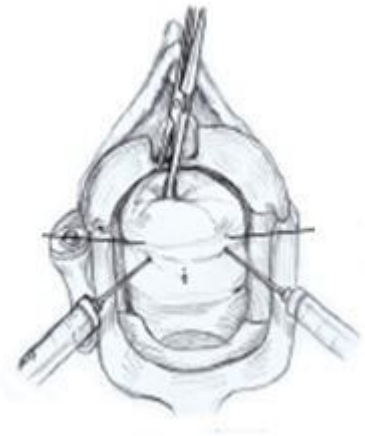

Fig.37 Paracervical block.

	EVALUATION CHECKLIST : 14.PARACERVICAL BLOCK	Right made 1 p	Didn't make/ incorrectly made 0 p
1.	Introduced his(her)self, informed and explained the procedure of the paracervical block.		
2.	Rated history and ruled out allergic reactions to local anesthetics, latex, etc.		
3.	Obtained the patient's consent for analgesia.		
	Placed the patient in gynecological position (lithotomy).		
4.	Prepared the required materials and tools.		
5.	Washed hands with soap and water and wiped with a clean towel.		
6.	Worked hands with disinfectant		
7.	Used sterile disposable gloves.		
8.	Asked an assistant to guide the light source to the perineum and vagina.		
9.	Inserted speculum or vaginal valves and visualized the cervix.		
10.	Worked the cervix with antiseptic solution with circular motion from internal cervical os.		
11.	Injected 2.0 ml of local anesthetic into the cervix superficially at 12.00, which corresponds to the place of tenacullum for fixing the cervix.		
12.	Fixed the anesthetized portion of the cervix with the tenacullum.		
13.	Injected paracervical successively into 4 points, 2.5 ml of local anesthetic: at 2.00, 4.00, 8.00 and 10.00 OR Paracervical 5 mL of local anesthetic in 2 points of the cervix, at 4.00 and 8.00.		
14.	Aspirated prior to injection in order to exclude intravascular needle penetration.		
15.	Moved progressively the needle from the surface (1 cm) to depth (3cm) and back to the superficial layers - injected by needle insertion and withdrawal.		
16.	Inspected the site of injection to exclude bleeding.		
17.	Used adecvate dose of Lidocaine.		
18.	Threw the disposable gloves in the box for used sanitary materials.		
19.	Performed hand hygiene. Washed hands with soap and water and wiped with a clean towel.		
20.	Gave all the explanations required by patients.		

Total score, points	
Total score, %	
Mark	
Data	

Student/rezident _____ Group _____

Teacher 1 _____ Signature _____

Teacher 2 _____ Signature_____

15. BLADDER CATHETERISATION - FOLEY CATHETER INSERTION

Purpose: emptying the bladder.

Material required:

1. Water, soap, clean towel;
2. Light source;
3. Disposable gloves;
4. Sterile fields;
5. permanent urinary Foley catheter (16-18 F)
6. Bowl with antiseptic solution
7. Sterile compresses or cotton wool
8. Cotton swab forceps
9. Sterile container to collect urine
10. 10.0 ml syringe with sterile saline solution to control permeability and filling Foley probe
11. Sterile Paraffin oil or glycerol lubrication of the probe

Equipment: Computerized high fidelity mannequin Surgical Chloe.

Technique and tips for Foley catheter insertion:

1. Welcome the patient and introduce yourself.
2. Verify patient identity (preferably two methods: verbal confirmation, verification bracelets, medical records).
3. Explain to the patient the content and purpose of the procedure, indications, possible complications.
4. Evaluate allergic reactions to latex, plaster, iodine, coagulopathies.
5. Obtain the informed consent.
6. Wash your hands with soap and water and dry them with a clean towel.
7. Prepare necessary materials and supplements.
8. Position the patient supine position with thighs apart or gynecologic position.
9. Place a sterile drape under patient thighs.
10. Open the plastic package containing the catheter without touching the catheter.
11. Put on sterile disposable gloves.
12. Process external genitalia with disinfecting solution.
13. Check the balloon/catheter permeability.
14. Lubricate the distal portion (2-5 cm) of the catheter.
15. Separate with one hand labia major and minor, view the urethral orifice.
16. With the other hand, using a cotton swab forceps, process peri-urethral mucosa with antiseptic solution in the direction from top to bottom.

17. With sterile hand carefully insert sterile urinary catheter in urethral orifice until urine flow (Figure 67).

18. Inflate the balloon. Attach the pre-filled syringe at the "Y" end of the catheter and introduse the sterile liquid (usually 10 ml).

19. Do not inflate the ballon as long as you see urine flowing through the catheter.

20. Gently pull the catheter until the inflated balloon reaches internal urethral meatus (feeling of resistance).

21. Connect the end of the catheter to the drainage bag / bowl.

22. Secure the catheter to the patient's abdomen or thigh without straining it.

23. Place the drainage system below the level of bladder.

24. Evaluate the functioning catheter, urine quantity and appearance.

25. Throw the disposable gloves in the box for used sanitary materials.

26. Wash your hands with soap and water and dry with a clean towel.

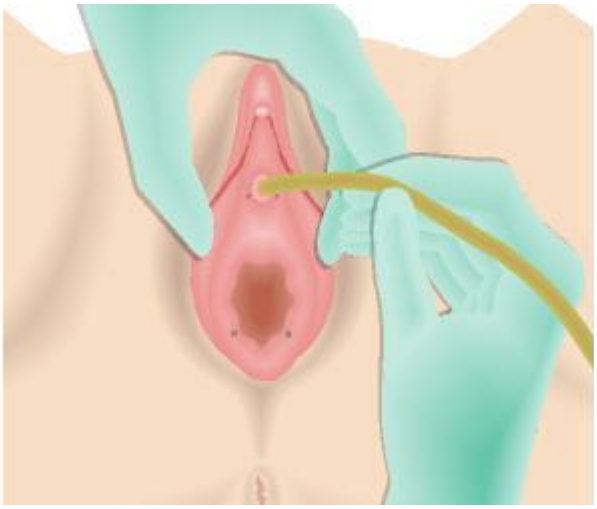

Figure 67. Insertion of urinary catheter.

	EVALUATION CHECKLIST : 15.BLADDER CATHETERISATION - FOLEY CATHETER INSERTION	Right made 1 p	Didn't make/ incorrectly made 0 p
1.	Welcomed the patient, introduced his(her)self, informed and explained the procedure.		
2.	Verified the identity of the patient.		
3.	Explained to the patient / career content and purpose of the procedure, indications, and possible complications.		
4.	Excluded allergic reactions to latex, plaster, iodine, and coagulopathies.		
5.	Obtained patient's informed consent.		
6.	Washed hands with soap and water and wiped with a clean towel.		
7.	Prepared necessary materials and supplements.		
8.	Positioned patient in supine position with thighs apart or in gynecologic position.		
9.	Placed sterile field under the patient`s thighs.		
10.	Opened plastic package containing the catheter without touching the catheter.		
11.	Used disposable sterile gloves.		
12.	Applied disinfecting solution on external genitalia.		
13.	Checked permeability of the balloon / catheter.		
14.	Lubricated distal portion (2-5 cm) of the catheter.		
15.	Separated with one hand labia major and minor, visualised the urethral orifice.		
16.	With the other hand, using a cotton swab forceps, processed peri-urethral mucosa with antiseptic solution from top to bottom.		
17.	Inserted the sterile urinary catheter in the urethral orifice until the urine flowed.		
18.	Inflated balloon correctly		
19.	Connected the catheter to the drainage bag / bowl.		
20.	Secured the catheter to the patient's abdomen or thigh without straining it.		
21.	Placed the drainage system below the level of bladder.		
22.	Evaluate the functioning catheter, urine quantity and appearance.		
23.	Threw the disposable gloves in the box for used sanitary materials		
24.	Performed hand hygiene. Washed hands with soap and water and wiped with a clean towel.		

Total score, points	
Total score, %	
Mark	
Data	

Student/rezident _____ Group _____

Teacher 1 _____ Signature _____

Teacher 2 _____ Signature_____

16. WARM CHAIN

Purpose: minimizing the possibility of newborn hypothermia.

Material required:

1. Water, soap, clean towel;
2. Disposable gloves;
3. Heated diapers.

Equipment: Low fidelity mannequin (task trainer) to stimulate delivery, fetus at term mannequin, computerized simulator mannequin Newborn Hal®, radiant heat source.

Technique and tips for warm chain assurance:

1. Warm delivery room.

2. Prepare a clean and warm surface for the birth.

3. Connect a radiant wormer source and a table for care of the newborn.

4. Cover the weighing with a diaper.

5. Put a set of clothes for newborn under radiant heat source.

6. Wash your hands with soap and water and wipe with a clean towel.

7. Put on disposable gloves.

8. Dry the newborn immediately after birth with a preheated diaper.

9. Wrap the newborn in another dry and warm diaper.

10. Check the vital signs of the newborn. If normal:

11. Place the newborn on the mother`s abdomen in skin to skin contact.

12. Cover the baby's head with a warm hat and put on his feet warm socks.

13. Wrap the couple mother-baby with a sheet / blanket.

14. Initiate skin to skin contact as early as possible and hold it for 1.5-2 hours.

15. Start early lactation.

16. Provide all explanations required by the patient.

17. Throw disposable gloves in the box for used sanitary materials.

18. Wash your hands with soap and water and wipe with a clean towel.

	EVALUATION CHECKLIST : 16. WARM CHAIN	Right made 1 p	Didn't make/ incorrectly made 0 p
1.	Warmed delivery room		
2.	Prepared a clean and warm surface for the birth		
3.	Connected a radiant wormer source and a table for care of the newborn.		
4.	Covered the weighing with a diaper		
5.	Has put a set of clothes for newborn under radiant heat source		
6.	Washed the hands with soap and water and wiped with a clean towel		
7.	Used disposable gloves.		
8.	Dried the newborn immediately after birth with a preheated diaper		
9.	Wrapped the newborn in another dry and warm diaper		
10.	Checked the vital signs of the newborn		
11.	Placed the newborn on the mother`s abdomen, in skin-to-skin contact.		
12.	Covered the child head with warm hat and put warm socks		
13.	Wraped the couple mother-baby with a sheet / blanket		
14.	Initiated skin-to-skin contact as early as possible and maintained this contact time for 1.5-2 hours.		
15.	Started early lactation		
16.	Provided all the explanations required by patient.		
17.	Threw disposable gloves in the box for used sanitary materials		
18.	Performed hand hygiene. Washed hands with soap and water and wiped with a clean towel.		

Total score, points	
Total score, %	
Mark	
Data	

Student/rezident _____ Group _____

Teacher 1 _____ Signature _____

Teacher 2 _____ Signature_____

17. EXAMINATION OF THE NEWBORN IN THE FIRST TWO HOURS AFTER DELIVERY

Purpose: determining the state of the newborn and determining the need for special care

Material required:

1. Water, soap, clean towel;
2. Disposable gloves;
3. Light source;
4. Pediatric stethoscope;
5. Pulseoximeter;
6. Axillary thermometer;
7. Non elastic centimetric tape;
8. Weighing.

Equipment: Term newborn manikin low fidelity (task trainer), mannequin Newborn Hal® computerized simulator, table for newborn, radiant warmer source.

Technique and tips for the initial examination of newborn at birth:

1. Introduce yourself, inform and explain to the patient about procedure of the examination of newborns after birth
2. Perform hand hygiene. Wash your hands with soap and water and wipe with a clean towel.
3. Put on disposable gloves.
4. Make the assessment of newborn in 2 hours after birth in the delivery room.
5. Examine the newborn in daylight or the light of day lamps.
6. Place the newborn on a dry and warm surface.
7. Perform an external assessment: skin color, pigment spots, breast tissue, nasal permeability, temperature, etc.
8. Examine the external genitalia, the sex of the newborn, exclude presence of anomalies.
9. Examine the head, face, mouth and eyes of the newborn.
10. Assess the dimensions and symmetry of newborn head.
11. Examine the newborn face and the presence of asymmetric movements.
12. Examine newborn mouth, palate development and abnormalities.
13. Evaluate the cotour of the skull, sutures and fontanelles.
14. Using both hands, examine newborn bones and verifie bilateral symmetry of them: the face, periauriculare regions, clavicles.
15. Examine the eyes of newborn; exclude the presence of signs of infection, congenital cataract, etc.
16. Examine the newborn chest, symmetry of chest movements.

17. Auscultate the lungs of the newborn, assesse breathing: breathe quality, rales, equality of respiratory sounds bilaterally.
18. Auscultate the newborn heart with a pediatric stethoscope; evaluate heart rate and quality of heart sounds.
19. Examine the abdomen: abdomen shape, presence of tumors or organomegaly.
20. Examine umbilical cord insertion, number of umbilical cord vessels, signs of bleeding, infection or hernia.
21. Examine the upper and lower limbs of the newborn. Assess symmetry of movements, bone abnormalities, spina bifida, etc.
22. Turn newborn on the abdomen and examine the vertebral column and sacral region.
23. Weight the newborn and compare weight with corresponding standards to the term of pregnancy.
24. Assess gestational age of the newborn within the first 2 hours after birth according to baby weight.
25. Throw disposable gloves in the box for used sanitary materials.
26. Wash your hands with soap and water and drying with a clean towel.
27. Provide to the mother all explanations on newborn examination.
28. Record in the observation sheet following details: name, gender, date and time of birth, weight, contact data, risk for infection, birth complications.

	EVALUATION CHECKLIST : 17. EXAMINATION OF THE NEWBORN IN THE FIRST TWO HOURS AFTER DELIVERY	Right made 1 p	Didn't make/ incorrectly made 0 p
1.	Introduced his(her)self, informed and explained the procedure of initial examination of the newborn at birth		
2.	Performed hand hygiene. Washed his/her hands with soap and water and wiped with a clean towel.		
3.	Used disposable gloves.		
4.	Placed the newborn on a dry and warm surface.		
5.	Performed an external evaluation of the newborn: skin color, pigmentation spots, breast tissue, nasal permeability, temperature, etc.		
6.	Examined the external genitalia.		
7.	Examined properly the head, face, mouth and eyes of newborn.		
8.	Examined the sacral region and vertebral column of newborn.		
9.	Examined the newborn chest, symmetry of chest movements		
10.	Auscultated the newborn heart with a pediatric stethoscope, evaluated heart rate and quality of heart sounds.		
11.	Examined the newborn abdomen and umbilicus.		
12.	Examined the upper and lower limbs of the newborn.		
13.	Weighed the newborn and compared weight with corresponding standards to the term of pregnancy.		
14.	Assessed gestational age of the newborn within the first 2 hours after birth according to baby weight.		
15.	Throw disposable gloves in the box for used sanitary materials.		
16.	Performed hand hygiene. Washed hands with soap and water and wiped with a clean towel.		
17.	Provided all explanations required by patients.		
18.	Recorded properly data in the observation sheet.		

Total score, points	
Total score, %	
Mark	
Data	

Student/rezident _____ Group _____

Teacher 1 _____ Signature _____

Teacher 2 _____ Signature_____

18.NEWBORN ANTROPOMETRY

Purpose: assessing the physical development of newborn

Material required:

1. Water, soap, clean towel;

2. Disposable gloves;

10. Non elastic centimetric tape;

3. Weighing;

4. Sterile cotton diaper.

Equipment: term newborn mannequin low fidelity (task trainer), computerized simulator mannequin Newborn Hal®, table for care of the newborn.

Technique and tips for performing newborn antropometry:

1. Introduce yourself, inform and explain to the patient about procedure of the newborn antropometry.

2. Perform hand hygiene. Wash your hands with soap and water and wipe with a clean towel.

3. Put on disposable gloves.

4. Wrapp the newborn in a sterile dry diaper, whose weight will not be taken in consideration.

5. Place the newborn on a dry and warm surface.

6. Measure the length of the newborn: stretch the non elastic tape along newborn body on the back, from cephalic end to calcaneal tubercle.

7. Measure the perimeter of the head: stretch the tape along the line of frontal and parietal lobes, at the level of the maximum transverse diameter (biparietal).

8. Measure the perimeter of the chest: stretch the tape along the line of nipples and axillary fossaes.

9. Measure the abdominal perimeter: stretch the tipe on circumference of the abdomen, above the umbilicus.

10. Throw disposable gloves in the box for used sanitary materials.

11. Wash your hands with soap and water and drying with a clean towel.

12. Provide to the mother all explanations on newborn examination.

13. Record data in the observation sheet.

	EVALUATION CHECKLIST : 18.NEWBORN ANTHROPOMETRY	Right made 1 p	Didn't make/ incorrectly made 0 p
1.	Introduced his(her)self, informed and explained the procedure of newborn antropometry		
2.	Performed hand hygiene. Washed his/her hands with soap and water and wiped with a clean towel.		
3.	Used disposable gloves.		
4.	Wrapp the newborn in a sterile dry diaper, whose weight will not be taken in consideration.		
5.	Placed the newborn on a dry and warm surface.		
6.	Measured properly the length of newborn.		
7.	Measure correctly the perimeter of the head		
8.	Measured properly chest perimeter.		
9.	Measured properly abdominal perimeter of the newborn.		
10.	Threw disposable gloves in the box for used sanitary materials.		
11.	Performed hand hygiene. Washed hands with soap and water and wiped with a clean towel.		
12.	Provided all explanations required by patients.		
13.	Recorded properly data in the observation sheet.		

Total score, points	
Total score, %	
Mark	
Data	

Student/rezident _____ Group _____

Teacher 1 _____ Signature _____

Teacher 2 _____ Signature_____

19. NEWBORN RESUSCITATION. BAG AND MASK VENTILATION.

Purpose: manually blowing lungs and respiratory assistance.

Material required:

1. Water, soap, clean towel;
2. Disposable gloves;
3. Dry and warm diapers;
4. Self - inflating bag of 500-1500 ml pressure with relief valve;
5. Source of oxygen;
6. Tubes/probes to connect to the source of oxygen;
7. Masks with padded edges, round or anatomical, of different sizes;
8. Suction probes 12-14 fr.

Equipment: Low fidelity newborn mannequin, resuscitation table for the newborn with radiant heat source.

Technique and tips:

1. Check and make sure the supplements are available and functional.
2. Ask for help.
3. Perform hand hygiene. Wash your hands with soap and water and wipe with a clean towel.
4. Put on disposable gloves.
5. Place the newborn on a clean and warm flat surface.
6. Start the stopwatch.
7. Dry and quickly wrappe the newborn with warm and dry diapers, except the head, face, and upper chest.
8. Place the infant's head in slight extension for airway patency.
9. Clean the airways by sucking the mouth and then the nose of newborn if he does not breathing.
10. Insert the suction catheter at a distance of 5 cm in the newborn's mouth and suck while withdrawing the catheter.
11. Insert the suction catheter to 3 cm into each nostril and suck while withdrawing the catheter.
12. Do not insert the catheter deep into the neck of the newborn to avoid causing apnea.
13. If the infant is not breathing, initiate ventilation.
14. Reposition the newborn's head in a neutral position. Hyperextension of the newborn neck can cause pharyngeal collapse and airway obstruction.
15. Apply chin lift and jaw thrust to pull the tongue forward and prevent the airway obstruction (Figure 1).
16. For chin lift place one hand on the forehead of the newborn and tilt the head back gently.

17. For two handed jaw thrust, place your hands on the newborn face bilaterally, lift the angles of lower jawone on each side, and deplace the mandible forward.

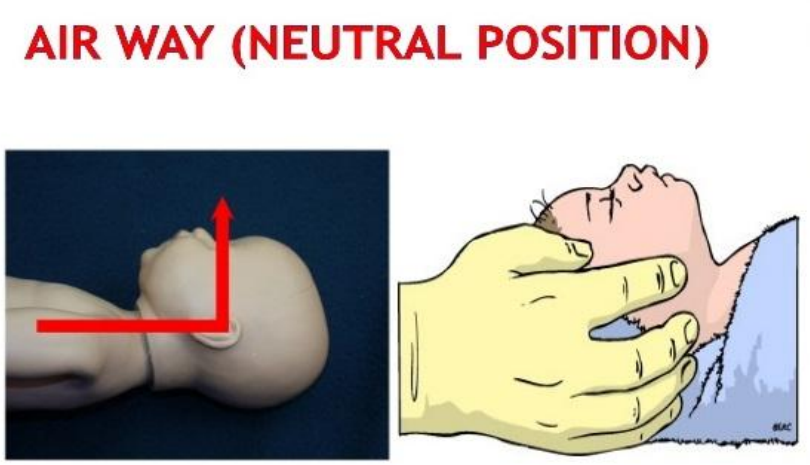

Figure 1. The neutral position of the head newborn

18. Choose a mask of an appropriate size and shape.
19. Apply the mask on newborn`s face encircling the chin, mouth and nose. Assure the top of the mask is over the bridge of the nose and the bottom is in the groove between the lower lip and the chin.
20. Create and maintain with one hand a tight seal between the mask and the face of the newborn. Use the thumb and the index to hold the mask and the inferior and superior mask borders and to maintain face seal. Hold the middle finger under mandibular symphysis and little finger under angle of mandible. Avoid pressure over neck and eyes.
21. Squeeze the bag with two finger tips or whole another hand, depending on the size of the bag. Exercise a pressure of 30-40 cm H2O. Each finger compression corresponds to 5 PIP cm mmHg.
22. Make the first 5 breaths and notice the chest expansions.
23. Assure slow initial ventilation, for 2-3 sec. with a rhythm: 1 compression of the bag; 2-3: decompression of the ball. Count out loud: ‘Breathe — two — three’ as you ventilate the baby. Squeeze the bag as you say ‘Breathe’ and release the pressure on the bag as you say ‘two — three’.
24. If chest expansions are present, ventilate at a rate of 40 resp. / min. for 1 min.
25. If chest expansions are missing: 1. Check the position of newborn head; 2. Reposition the mask on the newborn to ensure tightness between the mask and the face; 3. Increase the pressure of ventilation; 4. Repeat aspiration of the newborn`s mouth and nose to remove mucus, blood or meconium.

26. Stop ventilation after 1 minute and quickly assess if the baby breathe spontaneously.
27. If the infant is breathing normally, place the newborn in skin-to-skin contact with the mother.
28. If the infant is not breathing, or respiratory rate less than 30/min, continue ventilation with oxygen if available.
29. Arrange immediate transfer for specialized assistance.
30. Dispose suction probes in a sealed container or plastic bag.
31. Peform disinfection of mask and bag.
32. Throw disposable gloves in the box for used sanitary materials.
33. Wash your hands with soap and water and dry them with a clean towel.
34. Provide any explanations required by the mother concerning the status of the newborn and performed maneuvers.
35. Document the resuscitation procedures. Record the following details: 1. condition of the newborn at birth; 2. required procedures to start breathing; 3. elapsed time from birth to initiation of spontaneous breathing; 4. the outcome of resuscitation; 5. name and position of the persons involved in the resuscitation.

	EVALUATION CHECKLIST : 19. NEWBORN RESUSCITATION. BAG AND MASK VENTILATION.	Right made 1 p	Didn't make/ incorrectly made 0 p
1.	Prepared and verified the equipment and supplements.		
2.	Called for help.		
3.	Performed hand hygiene. Washed his/her hands with soap and water and wiped with a clean towel.		
4.	Used disposable gloves.		
5.	Placed the newborn on a flat clean and warm surface.		
6.	Started the stopwatch.		
7.	Wrapped the newborn quickly with a dry and worm diaper, except the head, face and upper torso.		
8.	Placed the newborn's head in slight extension for airway patency.		
9.	Cleaned the airways correctly by sucking newborn mouth and then nose.		
10.	Repositioned the newborn head in the neutral position using the correct chin lift and jaw thrust maneuver.		
11.	Applied correctly the mask on newborn face covering the chin, mouth and nose, ensuring tightness between the mask and face.		
12.	Performed first 5 insufflations and observed chest rise.		
13.	In case of the the absence of chest excursions: - Checked the position of head of newborn - Repositioned the mask on the newborn face - Increased pressure ventilation - Repeated aspiration of the newborn mouth and nose		
14.	Ventilated at a rate of 40 breaths per minute for 1 minute.		
15.	Stopped ventilation after 1 minute and evaluated quickly if the baby breathing spontaneously and heart rate.		
16.	If the infant is breathing normally, placed the newborn in skin-to-skin contact with the mother.		
17.	If the infant is not breathing or respiratory rate is less than 30/min. or if heart rate is less the 100 per minute, continued ventilation with oxygen (if available).		
18.	Arranged immediate transfer for specialized care.		
19.	Threw disposable gloves in the box for used sanitary materials.		
20.	Performed hand hygiene. Washed hands with soap and water and wiped with a clean towel.		
21.	Gave all the explanations concerning the status of newborn and Performed maneuvers to the mother.		
22.	Recorded all dates about resuscitation procedures in the observation sheet.		

Total score, points	
Total score, %	
Mark	
Data	

Student/rezident _____ Group _____
Teacher 1 _____ Signature _____
Teacher 2 _____ Signature_____

20. NEWBORN RESUSCITATION. CHEST COMPRESSIONS.

Purpose: Cerebral and heart oxygenation.

Material required:

1. Water, soap, clean towel;
2. Disposable gloves;

Equipment: Low fidelity newborn mannequin, table for newborn resuscitation.

Technique and tips:

1. Call for help.
2. Perform hand hygiene. Wash your hands with soap and water and wipe with a clean towel.
3. Put on disposable gloves.
4. Place the newborn on a clean and warm flat surface.
5. Start the stopwatch.
6. Place the thumbs of both hands on the lower third of the sternum, just below an imaginary line joining the nipples.
7. Grasp the newborn chest with both hands, with the fingers over the spine at the back.
8. Perform chest compressions. Compress the chest quickly and firmly, reducing the antero-posterior diameter of the chest by about one third.
9. Keep your fingers all the time in the region where you do chest compressions.
10. Perform chest compressions at a rate of 90 per minute with a rhythm of "one, and two, and three, breathe", alternanting with bag ventilations. Ensure a ratio of compressions to inflations in newborn resuscitation is 3:1.
11. Reassess the heart rate and breathing of the newborn after 30 seconds of chest compressions and ventilation with positive pressure.
12. Stop the chest compressions if the heart rate is above 60 beats per minute.
13. Throw disposable gloves in the box for used sanitary materials.
14. Wash your hands with soap and water and dry with a clean towel.
15. Provide to the mother any explanations concerning the status of the newborn and performed maneuvers.
16. Document resuscitation procedures. Record the following details: 1. condition of the newborn at birth; 2. procedures required to start breathing; 3. elapsed time from birth to initiation of spontaneous breathing; 4. the outcome of resuscitation; 5. name and position of the persons involved in the resuscitation.

	EVALUATION CHECKLIST : 20. NEWBORN RESUSCITATION. CHEST COMPRESSIONS.	Right made 1 p	Didn't make/ incorrectly made 0 p
1.	Called for help.		
2.	Performed hand hygiene. Washed his/her hands with soap and water and wiped with a clean towel.		
3.	Used disposable gloves.		
4.	Placed the newborn on a flat clean and warm surface.		
5.	Started the stopwatch.		
6.	Placed correctly the thumbs of both hands on the lower third of the sternum, just below an imaginary line joining the nipples. Grasped the newborn chest with both hands, with the fingers over the spine at the back.		
7.	Performed correctly chest compressions reducing the antero-posterior diameter of the chest by about one third.		
8.	Performed chest compressions at a rate of 90 per minute, with a rhythm of "one, and two, and three, and breathe", alternanting with bag ventilations.		
9.	Ensured a ratio of compressions to inflations in newborn resuscitation is 3:1		
10.	Reassessed the heart rate and breathing of the newborn after 30 seconds of the chest and ventilation with positive pressure.		
11.	Sopped chest compressions if the heart rate is more than 60 beats per minute.		
12.	Threw disposable gloves in the box for used sanitary materials.		
13.	Performed hand hygiene. Washed hands with soap and water and wiped with a clean towel.		
14.	Provided to the mother all explanations concerning the status of newborn and performed maneuvers.		
15.	Recorded all data about resuscitation procedures in the observation sheet.		

Total score, points	
Total score, %	
Mark	
Data	

Student/rezident _____ Group _____

Teacher 1 _____ Signature _____

Teacher 2 _____ Signature_____