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400L

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**QUESTIONS**

1. Use of partograph in the management of first stage of labor.
2. Management of 2ND and 3RD stages of labor.

**ANSWERS**

A partogram or partograph is a composite graphical record of key data (maternal and fetal) during labor entered against time on a single sheet of paper. Relevant measurements might include statistics such as cervical dilation, fetal heart rate, duration of labor and vital signs.

It is the best tool to help you detect whether labor is progressing normally or abnormally, and to warn you as soon as possible if there are signs of fetal distress or if the mother’s vital signs deviate from the normal range. Documenting your findings on the partograph during the labor enables you to know quickly if something is going wrong, and whether you should refer the mother to the nearest health centre or hospital for further evaluation and intervention.

**COMPONENTS OF A PARTOGRAPH**

1. Patient identification
2. Time: It is recorded at an interval of one hour. Zero time for spontaneous labor is time of admission in the labor ward and for induced labor is time of induction.
3. Fetal heart rate: It is recorded at an interval of thirty minutes.
4. State of membranes and color of liquor: "I" designates intact membranes, "C" designates clear and "M" designates meconium stained liquor.
5. Cervical dilatation and descent of head
6. Uterine contractions: Squares in vertical columns are shaded according to duration and intensity.
7. Drugs and fluids
8. Blood pressure: It is recorded in vertical lines at an interval of 2 hours.
9. Pulse rate: It is also recorded in vertical lines at an interval of 30 minutes.
10. Oxytocin: Concentration is noted down in upper box; while dose is noted in lower box.
11. Urine analysis
12. Temperature record

The partograph is actually your record chart for the laboring mother. It has an identification section at the top where you write the name and age of the mother, her ‘gravida’ and ‘Para’ status, her Health Post or hospital registration number, the date and time when you first attended her for the delivery, and the time the fetal membranes ruptured (her ‘waters broke’).On the back of the partograph (if you are not using another chart), you can also record some significant facts, such as the woman’s past obstetric history, past and present medical history, any findings from a physical examination and any interventions you initiate (including medications, delivery notes and referral).

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The next section of the partograph is for recording Contractions per 10 mins (minutes) initially and every 30 minutes.

Below that are two rows for recording administration of Oxytocin during labor and the amount given. The next area is labeled Drugs given and IV fluids given to the mother.

The Alert and Action lines in the section for cervical dilatation and fetal head descent, there are two diagonal lines labelled Alert and Action. The Alert line starts at 4 cm of cervical dilatation and it travels diagonally upwards to the point of expected full dilatation (10 cm) at the rate of 1 cm per hour. The Action line is parallel to the Alert line, and 4 hours to the right of the Alert line. These two lines are designed to warn you to take action quickly if the labor is not progressing normally, it is important you refer the woman to a health centre or hospital if the marks recording cervical dilatation cross over the Alert line, i.e. indicating that cervical dilation is proceeding too slowly.

One should do a digital vaginal examination initially to assess:

1. The extent of cervical effacement and cervical dilatation
2. The presenting part of the fetus
3. The status of the fetal membranes (intact or ruptured) and amniotic fluid
4. The relative size of the mother’s pelvis to check if the brim is wide enough for the baby to pass through.

Thereafter, in every 4 hours you should check the change in:

1. Cervical dilatation
2. Development of cervical edema (an initially thin cervix may become thicker if the woman starts to push too early, or if the labor is too prolonged with minimal change in cervical dilatation)
3. Position of the fetus.
4. Fetal head descent
5. Development of moulding and caput
6. Amniotic fluid color (if the fetal membranes have already ruptured).

You start recording on the partograph when the labor is in active first stage (cervical dilation of 4 cm and above). If you have to refer the mother to a higher level health facility, you should send the partograph with your referral note and record your interpretation of the partograph in the note.

The first stage of labor is divided into the latent and the active phases. The latent phase at the onset of labor lasts until cervical dilatation is 4 cm and is accompanied by effacement of the cervix. The latent phase may last up to 8 hours, although it is usually completed more quickly.

Vaginal examinations are carried out approximately every 4 hours from this point until the baby is born. The active phase of the first stage of labor starts when the cervix is 4 cm dilated and it is completed at full dilatation, i.e. 10 cm. Progress in cervical dilatation during the active phase is at least 1 cm per hour (often quicker in multigravida mothers).

In the cervical dilatation section of the partograph, down the left side, are the numbers 0–10. Each number/square represents 1 cm dilatation. Along the bottom of this section are 24 squares, each representing 1 hour. The dilatation of the cervix is estimated by vaginal examination and recorded on the partograph with an X mark every 4 hours. Cervical dilatation in multipara women may need to be checked more frequently than every 4 hours in advanced labor, because their progress is likely to be faster than that of women who are giving birth for the first time.

**2. MANAGEMENT OF 2ND AND 3RDSTAGE OF LABOR**

**MANAGEMENT OF SECOND STAGE LABOR**

Management includes the principle, the measures, preparation for delivery and the conduction of delivery.

1. The principles include:
2. To assist in the natural expulsion of the fetus slowly and steadily.
3. To prevent perineal injuries.

Measures include:

1. The patient should be in bed
2. Constant supervision
3. To administer analgesics
4. Vaginal examination.

Preparation for delivery include

1. The patient is wheeled to the delivery room.
2. Positioning.
3. The lower abdomen upper parts of the thighs, vulva and perineum are swabbed with antiseptic lotion.
4. Sterile legs and towels are applied.
5. Ask patients to bear down during contractions and relax in between.

Conduction of delivery include

* Delivery of the head
* Delivery of the shoulders
* Delivery of the trunk.

Nursing care of patients in second stage of labor

1. Never leave the patients alone once she has been transferred to the delivery room.
2. Encourage the patient to rest between contractions and push with contractions.
3. Position the patients’ legs in the stirrups for the lithotomy position.
4. Prepare the patients perineum
5. Monitor the patients’ blood pressure and the fetal heartbeat every 5 minutes and each after contractions.

Immediate care of the newborn

* Baby should be placed on a tray covered with clean dry linen with the head slightly downwards soon after delivery.
* Maintaining thermoregulation
* Suctioning to clear air passage
* Maintaining cardio respiratory function
* Oxygen maybe given as needed until the infant cries vigorously
* APGAR scoring
* Clamping and ligature of the cord: the cord is divided between 2 clamps to avoid bleeding from a possible second uniovular twin.
* Documenting urination or passage of meconium
* Administering vitamin k
* Prophylactic eye care
* Promoting parent newborn bonding
* Quick check is made to detect any gross abnormality.

**STEPS IN ACTIVE MANAGEMENT OF THE THIRD STAGE OF LABOR**1. Thoroughly dry the baby, assess its breathing and perform resuscitation if needed, and then place the baby in skin-to-skin contact with the mother:

(a) After birth of the baby, immediately dry the infant and assess its breathing. If the baby requires resuscitation, you may need to cut the cord immediately to care for the baby.(b) Then place the reactive infant, prone, in skin to-skin contact, on the mother. If the umbilical cord is long enough, place the baby directly on the mother’s chest. If the umbilical cord is short, place the baby on the mother’s abdomen until after cutting the cord. Be careful to leave some slack on the umbilical cord and do not unduly stretch the cord.(c) Remove the cloth used to dry the baby.(d) Cover both the mother and infant with a dry, warm cloth or towel to prevent heat loss.(e) Cover the baby’s head with a cap or cloth.(2) Administer an uterotonic drug within 1 minute of the baby’s birth:(a) Gently palpate the woman’s abdomen to rule out the presence of another baby. At this point, do not massage the uterus.(b) If another baby is not present, begin the procedure by giving the woman 10 IU of oxytocin by IM injection in the upper thigh. This should be done within 1 minute of childbirth. If available, a qualified assistant should give the injection.(c) In patients with intravenous access in place, 10–20 IU may be placed in 500–1000 ml of crystalloid and run quickly or 5 IU may be administered as an intravenous bolus, followed by a similar infusion.(3) Clamp and cut the umbilical cord:(a) Place one clamp 4 cm from the baby’s abdomen after cord pulsations have ceased or approximately 2–3 minutes after birth of the baby, whichever comes first.

(b) Gently milk the cord towards the woman’s perineum and place a second clamp on the cord approximately 2 cm from the first clamp.(c) Cut the cord using sterile scissors under cover of a gauze swab to prevent blood spatter. After mother and baby are safely cared for, tie the cord.

(d) Place the baby on the woman’s chest, in skin to-skin contact, and encourage breastfeeding.(4) Perform CCT:(a) Place the clamp near the woman’s perineum to make CCT easier.(b) Hold the cord close to the perineum using a clamp.

c) Place the palm of the other hand on the lower abdomen just above the woman’s pubic bone to assess for uterine contractions. If a clamp is not available, CCT can be applied by encircling the cord around the hand.(d) Wait for a uterine contraction. Only perform CCT when there is a contraction.(e) When there is a contraction, apply external pressure on the uterus in an upward direction (toward the woman’s head) with the hand just above the pubic bone.(f) At the same time with your other hand, pull with firm, steady tension on the cord in a downward direction (follow the direction of the birth canal). Avoid jerky or forceful pulling.(g) Gently hold the cord and wait until the uterus is well contracted again. If necessary, use a sponge forceps to clamp the cord closer to the perineum as it lengthens.

(h) With the next contraction, repeat CCT with counter traction.(i) Do not release support on the uterus until the placenta is visible at the vulva. Deliver the placenta slowly and support it with both hands.(j) As the placenta is delivered, hold and gently turn it with both hands until the membranes are twisted.(k) Slowly pull to complete the delivery. Gently move membranes up and down until delivered.

(5) Massage the uterus:(a) Massage the uterus immediately after delivery of the placenta and membranes until it is firm.(b) After stopping massage, it is important that the uterus does not relax again.(c) Palpate for a contracted uterus every 15 minutes and repeat uterine massage as needed during at least the first 2 hours after childbirth.

(d) Instruct the woman how to massage her own uterus, and ask her to call if her uterus becomes soft.(6) Examine the placenta and membranes for completeness.(7) Examine the genitalia and repair lacerations episiotomy if necessary.(8) Evaluate blood loss.(9) explain all examination findings to the woman and, if she desires, her family