16/MHS02/039

Maternal and Normal Midwifery

NSC 404

**Question 1: Use of partograph in the management of first stage of labour**

The partograph is a graphical presentation of the progress of labour, and of maternal and fetal condition during labour. Research studies have shown that complications due to prolonged labour from the mother and fetus is less common when the progress of the labour is monitored with partograph. It helps to detect signs of fetal distress or if the mother’s vital signs deviate from the normal range. It is the best tool that helps to differentiate if the labour is progressing abnormally or normally.

It helps to avoid complications like:

1. Hypertension
2. Infection`
3. Obstructed labour
4. Unsafe abortion
5. Hemorrhage
6. Prolonged labour

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

Advantages

* Provides information on single sheet of paper at a glance
* Early prediction of deviation from normal progress of labour
* Improvement in maternal morbidity, perinatal morbidity and mortality

Limitations

* It requires a skilled healthcare worker who can fill and interpret the partograph.
* Recent studies have shown there is no evidence that partograph use is detrimental to outcomes.
* Paper-partograph and the equipment required to complete it are often unavailable in low resource settings.
* Despite decades of training and investment, implementation rates and capacity to correctly use the partograph are very low.

Usefulness of partograph

1. It depicts the progress of labour at a glance
2. It is simple to use
3. It provides a practical teaching aid
4. It is an efficient means of exchange of technical information about labour progress between the team of care givers
5. Used to monitor fetal heart rate
6. Used to assess moulding and caput formation
7. Used in assessing the station (descent) of the fetal head by vaginal examination
8. Used to monitor cervical dilatation
9. To monitor the development of cervical oedema
10. Position of the fetus
11. Monitors uterine contractions
12. Used to know the state of membranes and colour of liquor: "I" designates intact membranes, "C" designates clear and "M" designates meconium stained liquor.
13. Monitor oxytocin administration
14. To monitor the vital signs of the mother especially the blood pressure

**Question 2: Management of second and third stages of labour**

1. **Second stage**

The second stage of labor is defined as that time from the completion of dilatation of the cervix to the delivery of the infant.

Management

* Continuously provide information, support, and encouragement to the woman and her companion.
* Encourage active pushing once the urge to bear down is present, with encouragement to adopt any position for pushing preferred by the woman, except lying supine which risks aortocaval compression and reduced uteroplacental perfusion.
* Listen frequently (every 5 minutes) to the fetal heart in between contractions to detect bradycardia.
* Check the maternal pulse and blood pressure, especially where there is a pre‐ existing problem of hypertension, severe anemia, or cardiac disease.
* Observe progressive descent and rotation of the presenting part. This includes observing progressive distension of the perineum and visibility of the presenting part, and vaginal examination especially where progress appears to be slow.
* Delay pushing for 1–2 hours or until the woman has a strong urge to push reduces the need for rotational and midcavity interventions
* Conduct the delivery with support for the perineum to avoid tears, and use of episiotomy only where a tear is very likely.
* Be ready to augment contractions with an intravenous oxytocin infusion during the second stage where contractions have become infrequent and where the fetal heart rate remains normal, to avoid the need for instrumental vaginal delivery or transfer.
* Be ready to undertake instrumental vaginal delivery (vacuum or forceps) where indicated for fetal bradycardia or non-advance of the presenting part.
* Promote Skin-to-skin contact

Skin-to-skin contact helps bonding, so it is a good idea to have your baby lifted onto you before the cord is cut so that you can feel and be close to each other straight away.

High‐quality care in the second stage of labor is necessary to prevent stillbirth and newborn complications arising from undetected hypoxia and acidemia, as well as maternal mortality and morbidity from complications such as vesicovaginal fistula, genital tract lacerations, infection, and hemorrhage.

1. **Third stage**

It is from the birth of the baby until expulsion of the placenta and membranes. There is increased risk of postpartum hemoorhage that last between 10 and 30 minutes

**Management**

* Assessment
* Place the baby in skin-toskin contact on the abdomen of the mother
* Dry the baby and assess the baby’s breathing and perform resuscitation if need be
* Cover baby’s head with a cloth or a bonnet to reduce temperature loss
* Cover the woman and the baby
* Uterotonic
* Administer an uterotonic e.g oxytocin or misoprostol within 1 minute after the baby’s birth and after ruling out the presence of another baby
* Cord cutting
* Clamp and cut the cord after cord pulsations have ceased or approximately 2-3 minutes after birth
* Cover the cord with a piece of gauze when cutting the cord to avoid splashing of blood
* Perform Controlled cord traction
* Place the clamp near the woman’s perineum to make the procedure easier
* Hold the cord close to the perineum using a clamp
* Place the palm of the other hand on the lower abdomen just above the woman’s pubic bone to assess for uterine contractions
* Perform the procedure while at the same time supporting the uterus by applying external pressure on the uterus in an upward direction towards the woman’s head.
* Delivery of the placenta
* During the placenta delivery, hold and gently turn it with both hands until the membranes are twisted
* Slowly pull to complete the delivery
* Gently move membranes up and down until delivered
* Uterine massage
* Massage the uterus immediately after delivery of the placenta and membranes until it is firm
* Assist the woman during recovery to breastfeed
* Monitor the newborn and mother closely
* Palpate the uterus through the abdomen every 15minutes for 2 hours to make sure it is firm
* Monitor the amount of vaginal bleeding
* Provide prevention of mother-to-child transmission care as needed