LABOUR & DELIVERY

Normally, labour and subsequent delivery occurs at about 38 to 41weeks after the start of the last normal menstrual period. If labor occurs before 37 completed weeks of pregnancy, it is considered premature labour, and after 42 weeks, is termed post mature (post term) labour. Labour can be divided into three stages:

STAGE 1 OF LABOUR

This starts from the earliest contractions up to the time of birth. It is generally the longest and involves the effacement (thinning out) and dilation (opening up) of the cervix to 10 centimeters. It can be further divided into latent and active phase.

Latent Phase

This first phase (early labor or latent phase) of stage 1 takes about 8 to 12hours (occasionally longer). During this time, the cervix begins to efface and dilates to 3 centimeters. This phase may begin with contractions, the rupture of the amniotic fluid (bag of waters), or the passing of the thick, blood-tinged plug of mucus (bloody show). This bloodstained plug may pass hours or sometimes several weeks before contractions begin. Contractions are the rhythmic, squeezing muscular activity that affects the walls of the uterus during labour. The contraction usually starts at the top of the uterus (uterine fundus) and last for 30 to 45 seconds. It may not be obvious to some women and can occur at an irregular basis (up to 30 minutes apart). With time, these contractions will become more regular and increases in intensity. During this first phase, the woman can chose to remains at home if she is in her first pregnancy and has easy and quick access to the hospital. She can move around, eat lightly or shower.

Active Phase

This phase starts when the cervix is at least 3 cm dilated and the contractions start coming regularly. At this time, a woman should be at the hospital, ready for delivery. On admission, an enema may be given. A regular physical and vaginal examination will be done to see how far the cervix is dilated. In general, the cervix usually dilates at a rate of 1 cm per hour. The baby's heart rate will be monitored, usually by Doppler ultrasound monitor, or by an electronic fetal monitor. Depending on the severity of the pain, the woman's desire and the doctor's advice, pain medication (analgesic) via injection may be considered or she may opt for a regional (epidural) anaesthetic. The epidural provides the best pain relief during labour and will be administered by an anaesthesiologist. Sometimes, an intravenous drip of glucose or saline water is administered to women in labour, especially if the labour progress is slow. Syntocinon (Pitocin), a drug used to stimulate labor, may be used if labour progress is slow, or if there is a medical need to speed it up. Inhalational gas may be given towards the end of the active phase if there is excessive pain associated with the strong contraction.

STAGE 2 OF LABOUR

The second stage of labour starts from full dilatation (10 cm) until the delivery of the baby and usually lasts about 1 to 2 hours. Contractions continue about every 2 to 3 minutes and last 60 to 90 seconds. Pushing and bearing down is done during contractions. The baby should descent through the birth canal with each contraction and pushing. When the baby's head is visible at the vaginal opening and

distending the vaginal outlet, a surgical incision (episiotomy) may be made in the perineum (area between the vagina and rectum) to widen the birth opening. Local anaethetic or pudendal block is given prior to the procedure, unless the woman is already on epidural. The baby's head emerges and then the shoulders; the rest of the body will emerges quickly. The umbilical cord will be clamped and cut. The baby is often placed on the mother's abdomen while this is done. In some cases, an immediate evaluation of the newborn is necessary. A special nurse or doctor will assess the baby status. Umbilical cord blood is routinely collected (5 to 10 mls) and send for routine tests. The results are usually available the following day. Upon special request by the couple, cord blood collection for storage will be done at this stage.

In some women, assistance may be needed to deliver the baby. This is indicated when:

- The woman is exhausted and cannot push effectively.
- To speed up delivery when the baby shows sign of distress.

The attending doctor will decide which instrument (listed below) to use, based on preference and the clinical situation.

- Ventouse (vacuum cup) – this is a cup, which can be made of either metal or soft silicone. The cup is placed at the back (near the top) of the baby's head and is connected to a machine that creates a suction pressure via a long tube. The cup is attached to the baby's head via negative pressure. The cup may cause the baby's head to be swollen and bruised at the site of the cup application. This usually settles after a few days.
- Forceps – these are like a pair clamps that are placed over the baby's head. The forceps blades may cause a red indentation or marks on the baby's face and will usually subside after a few days.

STAGE 3 OF LABOUR

The third stage starts after the birth of the baby and until the expulsion of the placenta. It usually takes less than 30 minutes. An intramuscular injection is routinely given immediately after the birth of the baby to contract the uterus. This helps to reduce blood loss associated with delivery. A final examination is conducted to be sure the entire placenta is out and there are no tears in the vagina or cervix. The placenta will be examined to ensure that it is completely expulsed. The episiotomy will be repaired in layers, using absorbable sutures (no need to remove the sutures).

Soon after delivery, the baby will be given to the mother for initiation of early breast-feeding. The woman will remains in the labour room for about 45 to 60 minutes for close monitoring.

Disclaimer

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