Sunday December 14, 2003

Delivery day

By DR PATRICK CHIA

EVERY labour and delivery is different. However, most follow a general pattern. Hence, the expectant mother has a general idea of the changes that will occur in her body to enable her to deliver the baby.

Usually, an expectant mother wants the baby's father with her during labour. This has been shown to be helpful since his encouragement and emotional support will help her relax so that she can reduce the need for drugs to relieve pain. Furthermore, sharing the experience of childbirth has been shown to improve bonding in the family. On the other hand, the father may not want to be present and, therefore, another partner (such as a sister or mother) may be more appropriate. The parents can decide what is best for them.

Most babies in Malaysia are born in hospitals, medical centres or delivery homes. Complications may arise during the labour process, such as placental abruption (premature detachment of the placenta) or fetal distress (due to lack of oxygen to the baby). However, the majority of women will have no problems at all. The doctors or midwives will anticipate labour complications that may arise and will normally take steps to avoid these complications or reduce their risks.

Childbirth education in the form of antenatal classes is important to help prepare both the father and mother for the entire process of labour and delivery. Knowing what to expect is excellent preparation for labour and delivery.

What is labour?

The following are a list of signs, which may indicate that you are in labour:

- Contractions. Labour starts with a series of rhythmic and progressive contractions of the uterus. This means that the labour pains become increasingly regular (two to three contractions in every 10-minute interval) and increases in intensity, to such an extent that it brings "tears to your eyes", as labour progresses.

Some women may experience back pain while others experience pain mainly in the abdomen. Others may suffer from pain in both places. These contractions help the cervix to thin out (efface) and gradually open (dilate).

- Bloody show. This is a small amount of blood mixed with mucus from the cervix and is usually the first clue that labour is about to begin. However, it may be discharged from the vagina as early as 72 hours before actual labour begins.
- Rupture of membranes. Occasionally, the amniotic sac that surrounds the baby breaks, releasing amniotic fluid. This is a definite sign that the baby is coming. When the water breaks, you should contact your doctor or midwife immediately.

When is it time to go to the hospital?

You should head for the hospital as soon as your contractions occur regularly – every five minutes, or two contractions in a 10-minute period. However, if you live a long way from the hospital or delay is anticipated in the event of a traffic jam, you may wish to leave home when the contractions are 10 minutes apart. You should also head for the hospital if the membranes rupture, regardless of the frequency of contractions.

However, there are instances when your pregnancy may become complicated. Should any of the following occur, you should go to the hospital immediately:

- Excessive bleeding
- Greenish vaginal discharge
- The loop of umbilical cord is inside the vagina or at the vaginal opening

What should I bring to the hospital?

1. A record of your contractions: when they started, how frequent they are, etc.

2. Your antenatal notes/records. Have ready copies of your antenatal blood results and other tests done. For example, any ultrasound scan report.

3. Clothes. Bring loose and comfortable clothing, including pyjamas and a change of clothes for when you go home.

4. Clothing to bring your baby home in. Have ready a simple outfit that is easy to put on your baby. Also, a soft blanket for your baby.

5. Books or magazines to read. This may help you pass the time and keep you occupied during the early stages of labour.

6. Basic toiletries. Although some hospitals provide them, you may like to bring your own. You may also like to include some disposable panties and sanitary towels.

7. Phone numbers of relatives and friends. Have ready a list of phone numbers of relatives and friends whom you may wish to call when the baby is delivered.

8. Camera/video cameras. Have them ready to avoid last minute hassles. Some labour rooms may not allow pictures to be taken, particularly of the labour itself. Please ask first.

What to expect when I reach the hospital/labour ward?

When you reach the labour ward, a nurse or midwife will check your weight, temperature, blood pressure and pulse rate. A urine sample is collected for analysis. Your abdomen is examined to estimate the size of your baby, the way the baby is lying and its presentation (if it is positioned with its head pointing downwards, in the direction of the vaginal opening). The fetal heart rate is assessed either with a "trumpet-like" pinnard stethoscope or with the cardiotocograph (CTG).

Most women will have their baby's heartbeat and contractions monitored by the CTG. The strength, duration and frequency of the contractions are then noted. An enema may be given to empty the bowel.

A vaginal examination is usually done to determine how dilated the cervix is and if the membranes have ruptured. In the event of bleeding or known ruptured membranes, the vaginal examination may be omitted.

How should I progress in labour?

In order to achieve a normal vaginal delivery, you will have to go through the three stages of labour:

The first stage starts when regular strong contractions begin and the cervix opens. It lasts until the cervix is fully dilated (opened) at 10cm. The first stage can last up to 12 hours. As a general rule, for each baby you have, your labour should get progressively shorter.

Contractions should become regular, occurring with increasing frequency until they occur every three to five minutes (two to three contractions in every 10-minute period). They will last longer (45-60 seconds) and will become more and more intense. Walking around and trying different positions may ease the discomfort of labour. However, you may opt for an epidural or other methods of pain relief if the pain becomes unbearable.

During labour, the stomach does not empty efficiently. This may cause inhalation of vomit and consequently an intense inflammation of the lungs, which is life-threatening. For this reason, eating is avoided as soon as you are in labour. Drinking is usually allowed but sometimes it is avoided as well, especially when a Caesarean delivery is

anticipated. You may be given fluids through intravenous tubing to prevent dehydration. It is normal to feel nauseous during the process of labour.

The heart rate of the baby is checked every 15 minutes during the first stage of labour. This is done using the pinnard or CTG and it aims to detect fetal distress (a slowing of the baby's heart rate). Sometimes, the baby's heart rate is monitored continuously with the CTG throughout the first stage of labour, especially if it is a high risk pregnancy, for example if the mother has diabetes or the baby is premature (less than 37 weeks).

During the latter part of the first stage of labour, you will feel intense pressure in your back and your pelvis. Your legs and thighs may ache and you may be shaky and irritable. You may feel intensely uncomfortable no matter what you do. It is usually at this time that the cervix is fully dilated (opened 10cm), bringing the first stage to an end. Pushing is discouraged before the cervix is fully dilated (opened) as this wastes energy and may tear the cervix.

The second stage starts when pushing commences. It ends when the baby is delivered. The second stage usually lasts between 30 to 90 minutes. You may feel an uncontrollable urge to push in the second stage of labour. If the urge to push is not there, the doctor or midwife will instruct you when to push or bear down. The contractions will normally occur at three to five intervals and this may be very exhausting for the mother. It is during this time that support from your partner is crucial.

You will usually be placed in a semi-upright position with the back supported by pillows or a backrest. This position is good as it makes use of gravity with less strain on the back ad pelvis. It allows a downward pressure of the baby through the birth canal and perineum. With your chin on your chest and both your hands behind your thighs, you will be encouraged to push or bear down. Sometimes the legs may be placed in lithotomy position (feet supported by stirrups on poles).

As delivery progresses, the vaginal opening stretches and the baby's head begins to appear. The midwife or doctor will place a hand over the baby's head and the other hand will support the perineum. In a controlled fashion, the baby's head and chin eases out of the vaginal opening. At the same time you will be asked to pant and stop pushing to prevent the vaginal tissue from tearing.

However, if the vaginal opening does not stretch, an episiotomy may be done. This is a cut made through the perineum and vaginal wall at the height of a contraction to prevent an imminent bad tear, which may be more difficult to repair. But first, a local anaesthetic is given, through a syringe and small needle, to numb the area.

After the baby's head is born, the body rotates and each shoulder eases out, followed by the rest of the body. Mucus and fluid is then suctioned out of the baby's nose, mouth and throat. The baby is placed onto the mother's abdomen and two clamps are placed on the cord, which is then cut in between. After the baby is dried, he/she will be wrapped in a blanket.

The third stage of labour involves delivery of the placenta or after-birth. It may take up to 45 minutes.

Having delivered the baby, the midwife or doctor places a hand on the abdomen to ensure the womb is well contracted. The hand then moves over the pubic area, while the other hand grasps the cord. With a firm downward traction, the placenta is delivered.

The placenta is quickly checked to make sure that it is complete. Sometimes, the doctor or midwife may remove clots or remaining pieces of placenta from the vagina.

An intra-muscular injection of syntometrine is usually given to the mother when the shoulders of the baby are delivered. This is to ensure that the womb is well contracted and there will not be too much blood loss during the third stage of labour.

The episiotomy or tear is then quickly repaired by placing dissolvable stitches. Again, local anaesthetic is injected to numb the area before stitching is done.

An analgesic or pain killer in the form of a suppository, is usually given at the end of the procedure. This will also help to reduce the inflammation and swelling around the wound

Breast feeding can commence immediately. The mother is observed carefully in the following few hours since most complications such as bleeding, may occur during that time.

- *Dr Patrick Chia is a consultant obstetrician and gynaecologist. This article is brought to you by ANMUM – Caring for you and your baby.*