

## Introduction

If a pregnant woman goes into labour whilst at sea, try to get her ashore immediately. If this is not possible, try to get a doctor or midwife to her. If this is impossible, do not panic. The mother does all the work in delivering the baby and mainly needs calm, sensible encouragement.

Most births occur between 38 to 40 weeks after the woman's last period. If earlier than 36 weeks, the baby will be premature. The earlier the delivery, the more the risk of complications and death of the baby.

On average, for a first child, labour takes about 16 hours. Women who have had children before can have a much shorter labour, and most will deliver within 12 hours. There are, however, wide variations.

## Stages of labour

There are 3 stages of labour

*Stage 1.* This stage involves the dilation of the cervix (neck of the womb), so that the baby can pass out of the uterus (womb). See Figure 10.1. It is difficult to say when labour commences exactly. The uterus will start contracting in a co-ordinated, regular pattern with some pains. A discharge of mucus mixed with blood may occur (the show). In the early part, the uterine contractions are relatively painless and occur at 5–10 minute intervals. The membranes, which hold the fluid around the baby in uterus, rupture and the fluid flows out of the vagina. Usually about 250–500 ml. The contractions will gradually get more frequent and stronger.

*Stage 2.* This stage involves the journey of the baby through the now dilated cervix, down the vagina (the birth canal) and into the outside world. The majority come head first. The pains and contractions will be much stronger, accompanied by a desire to push.

*Stage 3.* This stage involves the delivery of the placenta (afterbirth).

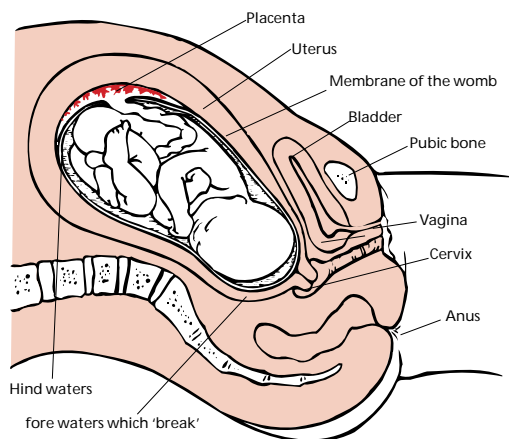


Figure 10.1 Child inside womb.

Introduction

Stages of labour

Preparations

Onset of labour, Stage 1

The delivery, Stage 2

After delivery, Stage 3

Subsequent management

Problems during the birth

### Preparations

Once it becomes apparent that the woman is in labour, get **RADIO MEDICAL ADVICE**.  
You will need:

- A clean, warm, private room, with a bed, adequate space to move around and preferably its own toilet and bathroom.
- Clean linen and waterproof sheet to protect the mattress.
- Bed pan.
- 2 pieces of tape about 10 inches long.
- Surgical scissors.
- Sterile dressings.
- Sterile receptacle for the afterbirth, and plastic bag to store it.
- Warmed towels and linen to wrap the baby, and a nappy.
- Something to act as a cot.
- Sanitary towels.
- Clean night dress/shirt for mother.
- Ergometrine 500 mg with needle and syringe.

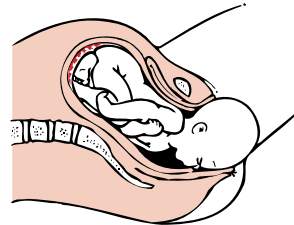
### Onset of labour, Stage 1

Once the contractions are coming regularly, every 10 minutes or so, the woman should be in the room. Allow her to find her most comfortable position, whether on the bed or wandering around. She should be encouraged to empty her bowels and bladder. She can have non-milky fluids (no alcohol) to drink as she wishes, and although traditionally eating is frowned on, if labour is prolonged, light refreshments may help. The pains of contractions are intense, however, do not be tempted to give any drugs unless specifically told to by a doctor. The woman will need a lot of calm reassurance.

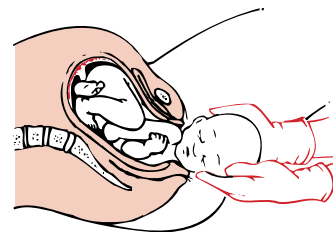
### The birth, Stage 2 (see Figs 10.2 and 10.3)

Once the cervix is fully dilated the baby is pushed down the birth canal by the contractions of the uterus. These will become stronger, every 2-5 minutes, and last longer. The mother will have the urge to push and should be encouraged to use her abdominal muscles during contractions. It is quite common to hear strong language from the mother. She should be encouraged to sit on the bed propped up at about 45 degrees.

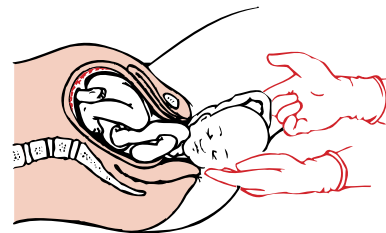
As the baby's head comes through the birth canal it will start stretching the skin between the vagina and the anus, by gently placing a hand there during contractions you may help prevent tearing of the skin, but not always. Do not press on the baby's head. The top of the head appears first and once all the head and face is visible,



(A) Head delivers 'face down,' ie. looking along baby's shoulder



(B) Head then rotates to face baby's front. Support head gently



(C) Umbilical cord may be around head or neck – see text

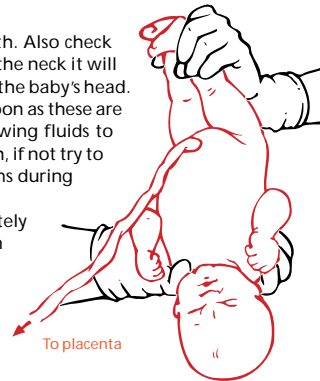
Figure 10.2 Delivery of a baby.

check for and clear any mucus (slime) from the nose and mouth. Also check that the umbilical cord is not around the neck. If tightly round the neck it will have to be clamped and cut now; if loose, it can be slipped over the baby's head.

The head will now rotate and the shoulders deliver next. As soon as these are free the rest of the baby will come very easily. Lift gently, allowing fluids to drain from the face, and check to see that the baby takes a breath, if not try to stimulate it by rubbing. If there is no response refer to 'Problems during birth'.

The baby should be wrapped in the warmed towel immediately to prevent heat loss. Once the cord has stopped pulsating it can be cut. Tie a piece of tape tightly about 5 cm from the baby's abdomen and the other 2 cm further along the cord towards the mother. Cut between the two ties. If there is bleeding from the baby's stump tie a further tie. (see fig. 10.4)

The baby will appear covered in blood, mucus and white flaky material, do not be tempted to wash it. It must be wrapped up warmly, the eyes, nose and mouth given a sterile wipe, and then be given to mother for a cuddle.



Drain baby's throat and nose. Hold carefully, baby is covered in a slippery slime

Figure 10.3 Immediately after birth.

### After delivery, Stage 3

Although the baby is now delivered, the placenta (afterbirth) is still attached to the wall of the uterus. It has to separate and then descend through the birth canal. This usually takes about 15–20 minutes. The woman experiences some more contraction pains, more blood and the cut cord lengthens. Do not pull on the cord, the placenta will come naturally. Once delivered, it looks like a small fleshy pizza. It should be put in a bag and stored in a freezer, laid flat until it can be examined by a doctor.

Once the placenta is expelled, give the mother the injection of intramuscular ergometrine. This helps reduce further bleeding from the uterus. If there is a lot of bleeding despite the injection, treat as for shock and get **RADIO MEDICAL ADVICE**. Occasionally the placenta will not deliver. Get **RADIO MEDICAL ADVICE**.

The vagina and skin around it should be checked for tears. Some may need stitching, get **RADIO MEDICAL ADVICE**.

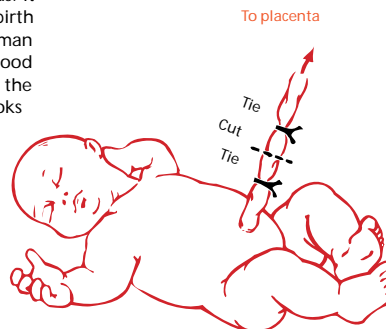


Figure 10.4 Tie and cut the umbilical cord.

### Subsequent management

Both mother and baby should be landed as soon as possible, and checked by a doctor.

#### The mother

After the birth, the mother needs to be able to wash, put on a clean night dress, and will need a sanitary towel. She should rest for the first 24 hours, and then she can start gently moving around.

Check her temperature daily, if it rises above 38 degrees centigrade, she will need antibiotics, either Ciprofloxacin 500 mg twice a day or Erythromycin 500 mg 3 times a day for 5 days.

She can eat normally and needs to drink plenty of fluids. She may initially find it painful to urinate and open her bowels. This usually is overcome with encouragement. Trying to urinate initially in a warm bath is often successful. After 3 days if she has not opened her bowels, a mild laxative can be used.

### The baby

Once delivered, the cord having been cut and having had an initial cuddle with mother, the baby needs to be gently dried. A sterile dressing must be placed over the umbilical cord stump, a nappy put on and baby warmly wrapped again.

The mother should then have the baby back and attempt to breast feed using both breasts. Initially the breasts give a yellowish fluid, called colostrum, which changes to milk over 48 hours. This is normal. The baby should be encouraged to feed little and often, including during the night. It is best to keep the baby in the same room as the mother, so it can be fed on demand. If there are any problems with feeding, get **RADIO MEDICAL ADVICE**.

If well, the baby can be gently washed when practical, but keep the umbilical stump dry. The dressing should be changed daily. The cord will shrivel and drop off in about 10 days.

## Problems during birth

### Different presentations

In some births, it is not the head that comes down the birth canal first, but the bottom. As soon as this is apparent, Get **RADIO MEDICAL ADVICE**. As soon as the legs and bottom are delivered, do not try and pull the baby, the head is still the biggest part and providing the cord is not tightly wrapped around the neck and it is still pulsating the baby will not suffocate. Wait until the mother pushes the baby out.

### Baby not breathing after delivery

This can be extremely distressing. Remove any blood or mucus from the mouth and nose. Rub the baby vigorously to try and stimulate it. If no response, put your own mouth over the baby's mouth and nose and gently blow air in, watching the chest to see if it rises, then allow the air to escape. Ask someone else to do chest compressions over the sternum (breast bone), using two fingers and pressing down no more than 2 cm, at a rate of 100 per minute. Continue doing this until the baby takes a breath or it becomes apparent that the baby is dead. Get **RADIO MEDICAL ADVICE**.

### Obvious deformity or death

If the baby is badly deformed or is still born (born dead), get **RADIO MEDICAL ADVICE**. Serious abnormalities can often be the cause of premature labour, which may have caused the unexpected delivery.