

Fetal monitoring in labour



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Introduction

This leaflet is designed to give you information about how we care for your unborn baby while you are in labour. It will describe the benefits and disadvantages of different types of fetal monitoring, and will answer some of your questions.

What happens to my baby during labour?

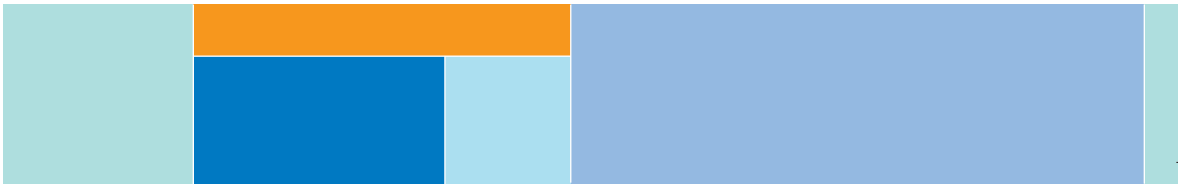
Most babies come through labour without problems, but there are a few who don't cope so well. During contractions blood can't get through the placenta (afterbirth) so easily. This is normal, and most babies cope without any problems. If a baby is not coping well, this may be reflected in the pattern of their heartbeat.

What is fetal monitoring?

One of the best ways of finding out if your baby is having difficulties is to listen to his heartbeat regularly throughout your labour. This is known as fetal monitoring. There are two main ways in which this may be done:

Intermittent auscultation

This means the midwife listens to your baby at intervals during your labour. She will either use the little trumpet-shaped device (Pinard stethoscope) or a hand-held



microphone (Doppler) which means you can also hear your baby's heart beat. She will do this for long enough to check the pulse rate of your baby, and to check the pattern the rate makes. The midwife will place her hand on the top of your tummy, where the top of the womb (fundus) is placed. By doing this, she can feel when the womb contracts and relaxes again. As you progress in your labour, she will do this more frequently. This is the best form of monitoring if you are healthy and have had a trouble-free pregnancy. If you are having a home birth, this is what the midwife will do.





Benefits of intermittent auscultation

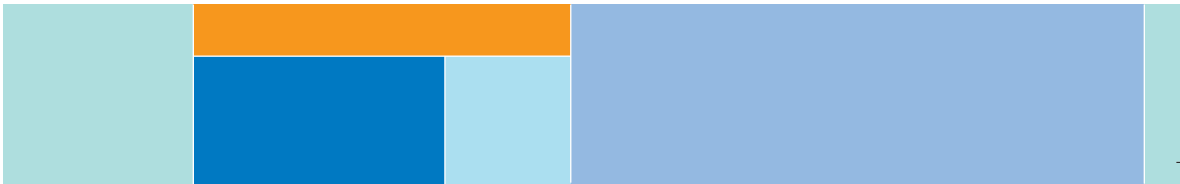
- You can move around freely during your labour
- You can use the pool for labour, as there is monitoring suitable for use in the water
- When pregnancy has been straightforward intermittent auscultation reduces the chances of unnecessary intervention


Risks or disadvantages

- Very sudden changes in your baby's heart rate will not be detected. However, these are very rare in healthy babies.
- If there is a concern about your baby's heart rate continuous electronic fetal monitoring is advised in such cases

Electronic Fetal Monitoring (EFM)

This form of monitoring means that your baby's heart rate is monitored continuously, using a cardiotocograph (CTG) machine. The device consists of two discs which are held in place by elasticated belts. One disc is placed at the top of your tummy where the top of the womb (fundus) is situated, and will monitor how often your womb contracts. The other is held in place where your baby's heart beat can be heard







clearly; the elasticated belts are not uncomfortable. The CTG machine produces a printed graph to show the pattern of your baby's heart rate and your midwife will explain the pattern to you.

EFM is recommended in a number of cases. For example, you might have a health problem such as diabetes or high blood pressure or your midwife or doctor may be concerned that your baby is not coping well. In this labour you may wish to have an Epidural or perhaps your labour is being induced; or you may even have twins. Another reason for using EFM is that sometimes when the waters break, the water (liquor) is discoloured or smelly. This may mean there is an infection, or the baby may have had his bowels opened.

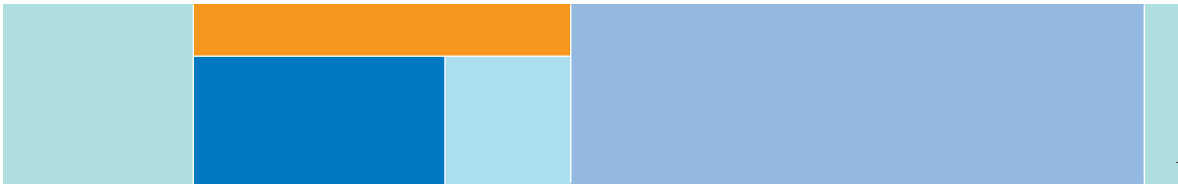
Where EFM is physically difficult (such as when the baby is in a very awkward position) but the midwife or doctor considers that it would be important, your midwife may advise you to have a fetal scalp electrode (FSE) in place. This simple piece of equipment is attached to your baby's scalp by the midwife during an internal examination.





There are occasions when the midwife may be concerned about your baby's heart rate pattern. In such cases she will contact a senior midwife and doctor to see you. Sometimes a sample of blood (FBS) can be taken from the top of your baby's head during an internal examination. The sample takes between 10 and 20 minutes to do, and is done to measure the oxygen level in the baby's blood. The result is obtained quite quickly, and will assist the doctors to know the best way to help your baby through labour. Sometimes the 'trace' gives the doctors some concern, but the FBS shows that your baby is actually coping very well. Sometimes the FBS will help the doctor to decide that your baby needs to be delivered quite quickly, for example by Caesarean Section.

Advantages or benefits to EFM

- You will be able to see quite clearly the pattern of your baby's heart rate
 - By continuously monitoring your baby's heart rate the midwife or doctor can see that it remains healthy
 - EFM can be reassuring for both you and your supporter
 - EFM is very useful when there is an existing reason for the midwife or doctor to be concerned about your baby
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Disadvantages or risks

- Your freedom of movement will be limited with EFM, so you may feel restricted





Further Information

The information in this leaflet is gained from guidelines which midwives and doctors use all the time. They are from local and national guidelines, and are produced from research. Your midwife or doctor can give you more information should you require it.

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