

Obstetrics and Gynaecology Department

Monitoring in Labour

Why would my baby's heart beat need monitoring during labour?

We monitor your baby's heart rate more regularly through labour to assess the wellbeing of your baby. Most babies come through labour without problems but there are a few who don't cope as 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.

How is a baby monitored during labour?

Your baby's heart rate can be measured either at regular intervals (intermittently listening to your baby's heart) or continuously (electronic foetal monitoring). Before starting any monitoring the midwife or doctor will take your pulse rate as well as listening to your baby's heart to make sure they can tell them apart.

Intermittent monitoring

If you are healthy and have had a trouble free pregnancy this is the recommended method of monitoring your baby's heartbeat during labour. This should happen every fifteen minutes during the first stage of labour increasing to once every five minutes or after each contraction for full one minute in the second stage of labour. This is the simplest way to listen to the baby's heartbeat and is done by the midwife using a Pinard Stethoscope, or a hand held 'Doppler'. A Pinard trumpet shaped stethoscope helps the midwife hear your baby's heartbeat through your abdomen (tummy). A Doppler is small hand held device, which looks like a microphone. It is placed against your abdomen and helps you, your midwife and your partner to listen to your baby's heartbeat at the same time.

When this method of monitoring is used to listen to your baby's heart beat you will be able to mobilise during your labour.

Continuous monitoring

This is a method of observing the baby's heartbeat by using a machine called a Cardiotocograph (CTG). The machine allows us to hear your baby's heart beat and record it on a graph paper, which we will interpret. This recording is obtained by placing two plastic pads onto your abdomen, one will record the heartbeat and one will record the contractions. Continuous monitoring keeps track of your baby's heartbeat for the whole of your labour.

If you are healthy with an uncomplicated, low risk pregnancy current research and evidence does not support the need for your baby's heartbeat to be monitored using a CTG when you are in labour.

Sometimes the midwife or doctor may recommend that continuous monitoring be used to listen to your baby's heartbeat. This may be because there are known risk factors



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relating to this pregnancy such as:

- Your pregnancy is more than 41 weeks
- Your pregnancy is less than 37 weeks
- You have high blood pressure
- Your baby is a small baby (noted on ultrasound scan)
- You have bled from your vagina at any time during labour
- You have a twin or triplet pregnancy
- You previously had a Caesarean Section

There are known risk factors relating to your labour such as:

- Your pregnancy is less than 37 weeks
- You are having an epidural analgesia (pain relief injected into the back)
- Your labour is induced (started artificially) or strengthened with a drip (oxytocin).
- You have Meconium stained liquor. This happens when your baby opens its bowels whilst inside your womb.
- Your baby is breech (going to be born bottom first)
- You have a long labour i.e. more than 10 hours in established labour shown on the Partogram (the graph used to show how your labour is progressing).
- Your temperature becomes high (38 °C) on two checks during your labour at least one hour apart.

There are known risk factors that are linked to your health such as:

- Diabetes
- Infection
- Pre-eclampsia
- Problems with your heart or kidneys

You may wish to have continuous monitoring for your own reasons, and obviously situations may arise in labour which requires continuous monitoring. This situation would be discussed at the time. The midwife or doctor caring for you during labour will be happy to explain the recording from the monitor, please feel free to ask for extra information if you need this.

Being attached to the monitor can limit your ability to move around. Whilst it may be okay to stand up or sit down, it will not be possible to have a bath or move from room to room.

What happens if there is a problem?

In some cases where there is more concern about the baby's heart rate, we will ask your consent to apply a small clip called a Fetal Scalp Electrode (FSE) to the skin on the baby's head. This is then connected to the CTG machine to obtain a more accurate recording of your baby's heart rate.

If there are any worries about your baby's heart rate, it may be necessary to take a sample of blood from your baby's head. This test is called a **Fetal Blood Sample**, sometimes referred to as an **FBS**. Your midwife or doctor will ask your consent to perform a vaginal examination, and insert a speculum into your vagina. During this

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examination a sample of blood will be taken directly from the skin of the baby's scalp. For this examination it may be necessary to place you in one of two positions. Left lateral or lying on your left side could be recommended by your doctor as the best position for taking the sample or it may be necessary for you to be lying on your back but tilted to one side with your legs raised up and supported either side of the bed with stirrups.

This test will measure the amount of acid and oxygen in the baby's blood. This reading will help us to decide whether your baby is distressed and needs to be delivered. Sometimes this test may be repeated if necessary. Occasionally this test may show a result to be inconclusive and a repeat test would be beneficial.

This leaflet is intending to supplement full discussion with the midwife or doctor caring for you. Please feel free to discuss this information and other questions you may have with the doctor or midwife.

For further information please contact your Community Midwife, General Practitioner or Ante-natal Clinic.

Addresses and phone numbers are located on the front of your **Patient Hand - Held Records**.

The Trust has access to interpreting and translation services. If you need this information in another language or format please contact the Ante-natal clinic and we will do our best to meet your needs.

The Trust operates a smoke free policy

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