What is an ultrasound scan?

An ultrasound scan is an easy way to look at the developing fetus inside your uterus. The image can be enlarged to view the uterus (womb), the placenta (afterbirth), the amniotic fluid (the water around the baby) and the anatomy of the baby.

Is it safe for me and for my baby?

Ultrasound scans have been performed in pregnancy for more than 30 years – until now there are no known risks for you or your fetus. Sound waves can generate heat as they cause small vibrations. This heat is minimal and disappears quickly but can build up if the scan is performed over a long period of time in the same area. Therefore, it is important that the professional doing your ultrasound keeps that in mind while performing the examination. There are international safety regulations to which all companies making ultrasound equipment have to comply.

Why do I need a scan in pregnancy?

Your scan is an important part of your pregnancy care. In the past doctors and midwives relied on external or internal physical examinations only. Whilst this is still important, scans can provide much more information. It is the only way of "seeing" the baby. Sometimes the physical examination may suggest a problem (for example: the abdomen feels too small or too big for the week of pregnancy). Ultrasound can provide more information on the growth of the baby and the amount of amniotic fluid. Scans may be performed at various times in pregnancy with different aims. The number of these scans will vary according to where you are having your scan and whether any problems are suspected.

The following clinical questions can be answered by these routine scans:

Scans in early pregnancy (up to 10 weeks):

- Is the pregnancy in the uterus?
- How many babies are there?
- If twins, what kind of twins are they?
- Is the baby alive (has a heartbeat)?
- When is the due date? (dating scan)

11-14 weeks scan:

- Is the baby early development appearing normal?
- How many babies are there?
- If twins, what kind of twins are they?
- Are there any anomalies visible?
- Is there extra fluid in the neck? (nuchal translucency screening)
- When is the due date? (dating scan)

During this scan you may also be given the option to have a risk assessment for chromosomal



anomalies (such as Down syndrome). Ask for more information on the possibilities to your doctor or midwife.

20 weeks (2nd trimester/anatomy) scan:

- When is the due date? (less reliable than done earlier)
- How many babies are there?
- Is the baby growing well?
- Are there any problems suspected for the baby? (anatomy scan)
- Where is the placenta located in the uterus?
- Is there a normal amount of amniotic fluid?

Growth scans (in the third trimester/last 3 months of pregnancy):

- Is the baby growing well?
- Is there a normal amount of amniotic fluid?
- What is the baby's position?
- Are there problems suspected that could not be seen earlier?

Doppler (blood flow) examination:

The ultrasound machine can also examine the flow of blood to the placenta or within certain blood vessels. Colour Doppler may be used to identify the vessels that will show in red or blue colours, according to the direction of blood flow. Blood flow produces a special sound which resembles the heartbeat. This examination can add important information on how well the placenta is working and on the condition of the fetus.

Special and additional ultrasound scans in pregnancy:

Cervical length measurement

This investigation is performed using a small probe inserted into the vagina (transvaginally) with the purpose of measuring the length of the cervix. If the cervix is short the doctor or midwife will discuss whether there is an increased chance of premature birth and possible measures to prevent it.

Anomaly scan and Fetal heart examination

If during the scan any suspicious finding is seen, the person performing the scan may refer you to a specialist. Sometimes, if the area of concern is specific (such as the heart) you may see a different sort of specialist, such as a heart specialist (fetal cardiologist). The scan may be repeated in more detail to look for the condition that is suspected. Further tests may be suggested. You may need to wait for results of these tests but should be told when to expect them and how you will be informed. You may feel anxious during this time and your doctor/midwife should recommend someone for you to talk to if you want to.



3D Scans

Many ultrasound machines are currently able to produce 3D pictures. These pictures can be useful to add some details when anomalies are suspected. The person performing the scan will decide if a 3D scan is necessary.

Do I have to have a scan in pregnancy?

No, the scan is 'your choice'. However, ultrasound is the only technique that allows the possibility to look at the fetus. The information is important for good pregnancy care and most doctors and midwives consider the scan a key part of this. It is however important that the purpose of the scan is explained so that you are not confronted with unwanted information. Ultrasound is not perfect and it can miss problems or incorrectly classify them. Further tests or a repeat scan may be required to confirm the findings. It is not unusual for an ultrasound scan to suggest one problem and for another to be found after the baby is born.

Ultrasound examinations are best considered as a way to obtain images and information that will be interpreted at a later stage. That could be straight after your scan or at a later date. This will depend on how the ultrasound scan service is arranged locally and may differ for different doctors and clinics.

Scans for fun

To see your baby can be a very positive experience however, the medical exam aims to check for problems not just pictures. Because a scan can be fun, there are many clinics (eg in shopping malls) that offer scan just for this purpose. You should be aware that sometimes even a "scan for fun" ultrasound can reveal unexpected problems with the baby and the pregnancy. In addition, the "scan for fun" may not look in the same details as the medical examination and may miss important information so there is a big difference between the two.

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