Ultrasound scans in pregnancy

www.antenatalscreening.wales.nhs.uk

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As part of your antenatal care, you will be offered two ultrasound screening tests. You can choose whether or not to have these tests. Please read this leaflet before you make up your mind.

This leaflet is for pregnant women and explains:

- what the tests are
- why they are carried out, and
- when they are done.

The scan is a way of checking for possible problems with your pregnancy. It is a screening test. This means it may show up problems that would then need to be checked by other tests. A scan cannot pick up all problems.
What is an ultrasound scan?
An ultrasound machine uses sound waves to create an image on a computer screen. The person who does the scan is called a sonographer. The sonographer will explain about the scan during your appointment.

How is the scan arranged?
If you decide you would like to have a scan, your midwife will tell you where it can be done and will arrange the appointment for you. If you have been given an appointment and then decide you do not want a scan, please tell your midwife and cancel the appointment.

How is the scan done?
The sonographer will get a clearer image of your baby if your bladder is not completely empty when you have your scan. Please try not to pass urine for about an hour before your appointment.

For the sonographer to see your baby clearly on the screen, the scan is carried out in a dimly lit room. Scanning involves a lot of concentration so the room is also kept very quiet. The sonographers will explain to you what they are doing and what they are looking for. You will be asked to lie on your back to have the scan. You do not need to wear any specific clothing for the scans. However, you will be asked to raise your upper clothes to your chest and lower your skirt or trousers to your hips. Gel is spread on your lower abdomen so that a device called a transducer can be passed backwards and forwards over your abdomen. Ultrasound waves do not pass through air so the gel makes sure there is good contact between your skin and the transducer. Your clothing will be protected from the gel with tissue paper. The transducer passes sound waves through your
abdomen into the womb. The sound waves bounce back off the baby and are translated into an image on a screen.

An ultrasound scan is simple and painless. The sonographer may need to press on your abdomen to see your baby properly.

**Are scans safe?**

As far as we know, the early pregnancy dating scan and the fetal anomaly scan we offer are safe for mother and baby.

**Early pregnancy and fetal anomaly scans**

Both of these scans can find problems before the baby is born. Finding out about a problem before the birth can help you and your partner prepare yourself. Sometimes it can help plan treatment for after the baby is born. Sometimes when women find out that there is a major problem, they may want to consider ending the pregnancy.

**What are the disadvantages of having these scans?**

Having the scans may make you anxious, especially if a problem is found. If you prefer not to know about any problems that your baby has before the birth, you need to think carefully whether you should have the scans. You should discuss your concerns with your midwife.

**Results**

**Will my results be confidential?**

The NHS keep the results of all tests confidential. Hospital policies vary on how many health-care professionals have access to your test results. Your midwife will be able to explain the local arrangements to you.

**How do I get the results of these scans?**

The sonographer will tell you the results of your scan at the end of the examination.
Can I bring family or friends with me when I have the scan?

Most babies are healthy, but because the scans can show abnormalities you may want to ask your partner or someone else who can support you to come with you to your scan. It is best not to bring children to the appointment. They can distract you and the sonographer during the scan.

Can I have a picture of the baby?

It is sometimes possible to buy pictures of your baby taken during the scan. Please tell the sonographer if you would like to do this before the scan starts.

The early pregnancy ultrasound scan

This scan is offered to all women, usually at 11 to 14 weeks of pregnancy.

How long will my scan take?

The early pregnancy ultrasound scan takes about 10 to 20 minutes. The scan is done to:

- check your baby’s heartbeat
- find out if you are carrying more than one baby (you will need extra antenatal care, and it is important to know if the babies are sharing the same placenta)
- measure your baby to check how pregnant you are and the date it is due (this is especially important if you are thinking of having more screening tests)
- measure the nuchal translucency (the small space at the back of the baby’s neck), if you have asked for Down’s syndrome screening, and
- check your baby’s development (the baby’s development is not very clear at this early stage, but sometimes serious problems can be detected).

Will I need another early pregnancy scan?

Sometimes the baby cannot
be seen clearly using an abdominal transducer, so the sonographer may suggest you have an internal scan. This is called a transvaginal scan, and it can give a more detailed picture. You will be asked to empty your bladder before this scan. A small transducer is inserted into the vagina, similar to having a tampon inserted. A vaginal ultrasound scan is not usually painful. The sonographer will explain about the scan and ask for your agreement to do it. If you do not want to have an internal scan, please tell the sonographer. You will be offered an appointment for another abdominal scan.

### Fetal anomaly ultrasound scan

This scan is offered at 18 to 20 weeks of pregnancy.

### How long will my scan take?

The scan usually takes about 15 to 30 minutes.

The scan is done to:
- check your baby’s physical development;
- help detect problems (also called anomalies) such as spina bifida and other neural tube defects;
- check the amount of fluid around the baby in the womb; and
- look at the position of the placenta.

The sonographer has a list of things to look for in your baby and will also take some measurements.

**Will I need another fetal anomaly scan?**

The sonographer will use an all Wales agreed checklist to look for certain conditions and structures, such as spina bifida. The sonographer may not be able to look for everything on the checklist. Sometimes it is not possible to see everything on the list during your scan. This can be because:

- your baby was lying in a
position which made the examination difficult
• it was too early in your pregnancy for the scan to be done, or
• you are above average weight for your height and this made looking at your baby difficult as the images were not clear.
If this happens, you will be given another appointment to come back for one more scan to see if the sonographer can complete the list. It is not always possible for the sonographer to complete the list, even on the second appointment.

What problems can the scan find?
A scan can show some problems with a baby’s development, but not all. Some problems with your baby may develop after 20 weeks and some may not show up on the scan. This is why, in a small number of cases, babies are born with problems even though no problem was seen during the scan.

Overleaf is a list of some examples. The right-hand column shows how likely it is that an anomaly scan could identify each problem if your baby has the condition. This list does not include all abnormalities that may be seen.

Some problems with the baby may be caused by the baby having chromosome problems which affect the way it develops.
If a chromosome problem is suspected, you may be offered an amniocentesis. You can find information on this test in a separate leaflet.

Other very rare conditions can be detected on the fetal anomaly scan, such as major kidney and limb problems. Some conditions cannot be detected on this scan, such as small problems with the way the baby is developing, problems that develop after the scan, and conditions like cerebral palsy and autism.
What will happen if a problem is found, or suspected, during the scan?

If the sonographer finds a problem, they will tell you about it and you will be able to talk to the midwives or hospital doctor in your antenatal clinic.

The chance of the problem being seen on an ultrasound anomaly scan at 18 to 20 weeks

<table>
<thead>
<tr>
<th>The problem</th>
<th>Spina bifida (skin or bone not covering the spinal cord)</th>
<th>90%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Spina bifida is a fault in the development of the spine and spinal cord which leaves a gap in the spine. The spinal cord connects all parts of the body to the brain.</td>
<td></td>
</tr>
<tr>
<td>Major heart condition, for example: tetralogy of fallot</td>
<td>40%</td>
<td></td>
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<tr>
<td>Tetralogy of fallot is a serious heart condition where the heart has not developed in the same way as a normal heart in the womb. This condition will need surgery usually in the first year of birth.</td>
<td></td>
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<tr>
<td>Autism</td>
<td>0%</td>
<td></td>
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<tr>
<td>Autism cannot be picked up on scan as there is no structural abnormality. Autism is a lifelong developmental disability that affects how a person communicates with, and relates to, other people. It also affects how they make sense of the world around them.</td>
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<td></td>
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</tbody>
</table>

Data from: Welsh Congenital Anomaly Register and Information Service (CARIS)

Some small problems will only need more scans at a later stage of your pregnancy.
Sometimes it is not possible, at the first anomaly scan, for the sonographer to tell definitely what the problem is. You might be offered another scan in a different department or with a
specialist dealing with the type of problem your baby is suspected of having.

**Diagnostic tests following a detailed scan**

You might also be offered another test, such as amniocentesis. You will be given more information on any other tests by your midwife or obstetrician (hospital doctor).

**What will happen if a definite anomaly is found?**

Finding out about a problem your baby may have before the birth can help you and your partner prepare yourselves. Information about the type of problem can be used to prepare for how, when and where your baby is delivered. Your baby may need to be born in a different hospital that can provide the specialised staff and care that your baby may need.

A very small number of problems can be treated before the baby is born. If the problem is serious, you may decide to continue with your pregnancy or consider ending your pregnancy. These are difficult decisions and you will be given time, information and support to help you make a decision that is right for you.

Finding out that your unborn baby has a problem is distressing and deciding what to do is hard. Most women want and need some support. This might come from your partner, family or friends or from the health professionals who are caring for you. You can choose to bring your partner or a friend to hospital appointments with you.
More information

You can get information about ultrasound scans from your midwife, your hospital doctor (your obstetrician), your sonographer and from the Antenatal Screening Wales website at:
wwwantenatalscreening.wales.nhs.uk