Antenatal and Newborn Screening Programmes

Offered as part of the NHS Fetal Anomaly Screening Programme

This booklet gives you some information about the purpose of the ultrasound scan in mid-pregnancy, so you can decide whether to have this examination or not.

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What is the purpose of a mid-pregnancy ultrasound scan?
This section includes our reasons for offering a mid-pregnancy scan and what a scan can tell you about your baby’s health and development.

Having a scan
This section includes preparing for the scan and what happens in the scan room.

Scan results and findings
This section includes what happens next if everything appears normal, getting a picture of your baby and what will happen if a problem is found or suspected.

Detection rates table

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What is the purpose of a mid-pregnancy ultrasound scan?

Why am I offered a mid-pregnancy scan?
A mid-pregnancy scan forms part of the antenatal screening programme that is offered to all pregnant women. It usually takes place at 18-20 weeks and the main purpose of this scan is to look for abnormalities.

What kind of scan will I be offered?
You will be offered a scan that produces a two-dimensional (2-D) black and white image. The 3-D and colour scan images we sometimes see on television and in magazines are not made by ordinary scan machines, and are not used in the NHS screening programme.

Is the mid-pregnancy scan safe?
As far as we know, the scan we offer is safe for mother and baby.

Does everybody have a scan?
We offer the scan to everybody, but you do not have to have it if you do not want to. Before making up your mind, there are a few things you do need to know, so please read this booklet carefully.

Giving consent for the scan.
Remember that this is a clinical examination and you will be asked to give consent before it is carried out. Make sure you understand what is going to happen - feel free to ask any questions.

What can a scan tell me about my baby’s health and development?
Before deciding about a scan, you need to know something about what scans can and can not tell you.

During the scan, we take a very careful look at your baby from head to toe. Usually we learn that the baby appears to be healthy and is developing well. Sometimes, though, we find a problem. Some problems are quite common, others very rare. A few are serious, but most are minor, and they will be explained in detail to you.

Scans have their limitations. Sometimes we have to say there might be a problem, but we can not say for certain. In a small number of cases, babies are born with abnormalities, even though no problem was identified by the scan.

The rest of this booklet tells you what it’s like to have a scan and what happens if any kind of problem, or possible problem, is found.

Remember, that for most people, their scan is a happy experience. Unfortunately though, that is not true for everybody, which is why we ask you to read the booklet carefully, and then make a decision about whether you want a scan or not. We will respect your choice.
Having a scan

Can I bring family or friends with me when I have the scan?
Hospitals have different policies about this, and it is a good idea to check beforehand, but most hospitals welcome partners into the room. Young children may not be allowed in while the procedure is being performed, because they can cause distraction.

Remember, ultrasound is an important clinical examination and is treated the same way as any other hospital investigation.

Do I need to drink water and have a full bladder before my scan?
Yes – but your bladder should not be so full that you are uncomfortable. Your baby will be in a slightly higher position when there is some fluid in your bladder, and the sonographer gets a better view that way.

What will happen when I go into the scan room?
Most scans are carried out by specially trained staff called sonographers. In order for the sonographer to get good images of your baby, the procedure is carried out in a dimly lit room. Scanning requires a lot of concentration, especially if your baby is very active; it is for this reason that scanning is performed in a quiet, dark room.

You will first be asked to lie on a couch. Then you will be asked to raise your upper garments to your chest and lower your skirt or trousers to your hips. Tissue paper will be tucked around your clothing to protect it from the ultrasound gel, which will then be applied to your abdomen. The sonographer then passes a hand held device called a probe over your skin, and it is this probe which sends and picks up the ultrasound waves.

Ultrasound waves do not travel well through the air, so we use the gel to make sure there is good contact between the probe and your skin.

The sonographer performs the scan in a systematic way, carefully examining each part of your baby’s body. Having the scan does not hurt, but occasionally the sonographer may need to apply slight pressure if there is difficulty in checking some of the anatomy.

During the examination, sonographers need to keep the screen in a position that gives them a good view, either directly facing them or at an angle, but they will show you the baby once the scan has been completed.
How long will my scan take?
A scan can take anything from 10 - 40 minutes. The images created on the screen are usually recognisable, for example, the head, heart and limbs. However, the sonographer may be prevented from getting good pictures if your baby is lying in an awkward position, or is moving around a lot. If you are overweight, this can reduce the quality of the scan image, because there is more tissue for the ultrasound beam to get through before it reaches the baby. If it is difficult to get a good image, scanning may take longer, or have to be repeated at another time.

Scan results and findings

If everything appears normal, what happens next?
The vast majority of scans show that the baby is developing normally, and no problems are found. This is because most babies are healthy and do not have abnormalities.

Will the sonographer tell me the sex of my baby?
This depends on the policy of your hospital. Some hospitals have a policy of not revealing the sex of your baby. In others, you can be given the information if - and only if - the sonographer can get a good view. Even then, the information can turn out to be wrong. If your baby is lying in an awkward position, it may be impossible to tell.

Can I have a picture of my baby?
You will need to check if your hospital provides this service. If they do, there may be a charge.

Will I need another scan?
If everything appears normal, you will probably not need another scan in this pregnancy.

If the sonographer does not see everything clearly, perhaps because you are overweight or your baby is lying in an unhelpful position, the scan may need to be repeated on a different day. This happens quite often and doesn’t mean the sonographer has seen anything to worry about.

Can the scan detect all problems?
Not always, no. To begin with, a number of things can affect how good a view the sonographer can get. These include the position and age of your baby, the amount of fluid ("waters") surrounding your baby, your own bodyweight, and scar tissue left by any abdominal operations, such as a previous Caesarean section. Also, some problems only develop after 18 - 20 weeks, and some can never be seen on a scan because they have no effect on the appearance of the baby. This means that in a small number of cases, babies are born with abnormalities, even though no problem was identified by the scan.
What kind of problems can be seen?
Major abnormalities in the development of the baby, such as spina bifida, are usually obvious on the scan and the sonographer and doctors can be absolutely certain of the findings. Scans are not so reliable at seeing problems such as some heart defects, and we do not expect to pick up every heart condition before birth.

Sometimes minor variations in the baby’s anatomy are seen. Usually these mean nothing at all, but sometimes we see a pattern which tells us there could be an underlying problem. Some minor problems may require follow up care after delivery.

What will happen if a problem is found, or suspected, during the scan?
If any problem is found or suspected, the sonographer may ask for a second opinion. You would then be told what the concerns are, but the exact nature of the problem might not be clear at this stage.

You might be offered another test, such as an amniocentesis, to find out for certain if there is a problem. If you are offered further tests, we will give you more information about them. You can then choose whether you want to have them or not.

If necessary, you will be referred to a doctor who is a fetal medicine specialist; this might be in another hospital. You should be given an appointment within a few days.

In most cases, further tests do not find a problem. However, any extra testing can cause great anxiety for parents, and we do know that for some people the anxiety can last throughout the rest of the pregnancy.

You may want to ask questions and to talk about your worries with your own midwife or consultant, and in many hospitals a specialist screening midwife is also available. Other sources of information and support are listed at the back of this booklet.

What will happen if a definite abnormality is found?
It depends on the condition and how serious it is. Some conditions may turn out not to be serious, and some get better on their own. You may be offered further scans throughout the pregnancy to monitor these. If the condition is serious, you will be talked through your options, which may include a termination of the pregnancy. If you need to make any decision, you will be given time, support and information by your midwife and the hospital team, and your choice will be respected. Contact details of organisations and support groups you might find helpful are given at the back of this booklet.

Not every abnormality can be seen on a mid-pregnancy scan.
Can anything be done before the birth?
Finding out about a condition before birth can help parents prepare themselves, and sometimes it can help to plan treatment after the baby is born. For example, if your baby is known to have a problem that will need an operation soon after birth, such as a repair of a hernia in your baby’s tummy, arrangements can be made to deliver your baby in a hospital where this can be done within the first few hours after birth.

Can the baby have an operation before it is born?
Unfortunately, only a very few problems can be treated in this way at this time.

What if I would prefer not to know if my baby has an abnormality?
If you would prefer not to know, you need to think carefully about whether you should have a scan at all. You may find it useful to talk to your midwife before deciding.

Detection rates table

Serious problems are very rare. If there is a serious problem, what are the chances that we will be able to see it on an ultrasound scan?

<table>
<thead>
<tr>
<th>Description</th>
<th>Problem</th>
<th>Chances of being seen</th>
</tr>
</thead>
<tbody>
<tr>
<td>A defect of the skull and absence of the brain</td>
<td>Anencephaly</td>
<td>99%</td>
</tr>
<tr>
<td>Open spinal cord</td>
<td>Spina bifida</td>
<td>90%</td>
</tr>
<tr>
<td>Defects of the abdominal wall</td>
<td>Gastrochisis/exomphalos</td>
<td>90%</td>
</tr>
<tr>
<td>Missing bones or limbs</td>
<td>Major limb abnormalities</td>
<td>90%</td>
</tr>
<tr>
<td>Missing or abnormal kidneys</td>
<td>Renal abnormalities</td>
<td>85%</td>
</tr>
<tr>
<td>Excess fluid within the brain</td>
<td>Hydrocephalus</td>
<td>60%</td>
</tr>
<tr>
<td>A defect in the muscle which separates the chest and abdomen</td>
<td>Diaphragmatic hernia</td>
<td>60%</td>
</tr>
<tr>
<td>Structural heart defects</td>
<td>Congenital heart defects</td>
<td>25%</td>
</tr>
<tr>
<td>Spasticity</td>
<td>Cerebral Palsy</td>
<td>Cannot be seen</td>
</tr>
<tr>
<td>Autism</td>
<td>Inability to relate in an ordinary way to people and situations</td>
<td>Cannot be seen</td>
</tr>
</tbody>
</table>

Based on table from RCOG 1997
Contact details

Who can I talk to if I have any questions or concerns about the mid-pregnancy scan?

You can contact your midwife or doctor, and you can get more information about screening from the following organisations:

**Antenatal Results and Choices** – www.arc-uk.org
Helpline/telephone 0207 631 0285
ARC offers information and support to parents who are making decisions before, during and after the antenatal testing process.

**Contact a Family** – www.cafamily.org.uk
Contact a Family is a UK-wide charity providing support, advice and information for families with disabled children. Helpline 0808 808 3555. This free helpline for parents and families is open from 10am to 4pm Monday to Friday.

**S.O.F.T. U.K.** – www.soft.org.uk
S.O.F.T. UK provides support for families affected by Patau's Syndrome (Trisomy 13), and Edward's Syndrome (Trisomy 18). UK helpline 0121 351 3122.

**National Fetal Anomaly Screening Programme**
www.screening.nhs.uk/fetalanomaly/home.htm

References


