FIRST TRIMESTER · PATIENT INFORMATION

The 12-Week Scan: What Can It Tell You?

What a detailed scan at 11 to 14 weeks can show about your baby's development, the placenta, twins and your own pregnancy risks.

The 12-week scan is one of the most important scans in pregnancy. For many parents it is the first clear view of their baby, and the moment the pregnancy is dated accurately.

It is often thought of as a dating scan and a screening test for Down's syndrome. With modern ultrasound and specialist expertise, a detailed scan at 12 to 13 weeks can also tell you much more about your baby's early anatomy and heart, the placenta, twins and the risk of pre-eclampsia.



Your baby at around 12 weeks

KEY POINTS

- A detailed first-trimester scan is done between 11 weeks and 13 weeks 6 days, when your baby measures about 45 to 84 mm.
- As well as dating and screening, it can find several major structural and heart conditions weeks before the 20-week scan.
- It can also estimate your risk of preterm pre-eclampsia and show whether twins share a placenta, so the right care can be planned early.
- A normal scan is reassuring, but the 20-week anatomy scan is still essential.

When is the 12-week scan done?

The routine NHS dating scan is offered between 11 and 14 weeks. A detailed first-trimester scan, including nuchal translucency and combined screening, is done between 11 weeks and 13 weeks 6 days, when your baby's crown–rump length is about 45 to 84 mm. At this stage your baby is large enough for many structures to be checked, and the screening markers can still be measured reliably.

What are the aims of the 12-week scan?

Every first-trimester scan at The Pregnancy Clinic is carried out by a consultant in fetal medicine, following Fetal Medicine Foundation standards. The scan has five main objectives:

1. **Accurate dating:** measuring your baby's crown–rump length gives the most accurate due date, which guides the timing of all your later care.

2. **Examination of your baby's anatomy:** a systematic check of the brain, face, spine, heart, abdomen, bladder and limbs. With high-resolution imaging and colour Doppler, several major structural and heart conditions can be found weeks before the 20-week scan.
3. **Screening for common genetic conditions:** the nuchal translucency, nasal bone and blood flow in the ductus venosus and across the tricuspid valve, combined with a blood test or NIPT, screen for Down's, Edwards' and Patau's syndromes.
4. **Screening for pre-eclampsia (optional add-on):** your history, blood pressure, uterine artery Doppler and a blood test give an individual risk of preterm pre-eclampsia. Women at high risk benefit from aspirin started at 11 to 14 weeks.
5. **In twin pregnancies, assessment of chorionicity:** whether the babies share a placenta and an amniotic sac, which decides how often they need to be monitored.

We also check the position and appearance of the placenta and, after a previous caesarean, its relationship to the scar.

The routine scan and a detailed scan

The routine NHS scan checks that the pregnancy is progressing, confirms the heartbeat and the due date, identifies twins and, if you choose, offers combined screening for Down's, Edwards' and Patau's syndromes. A systematic check of your baby's anatomy is not its main aim. A detailed first-trimester scan builds on this, to give as much reliable information as possible, early on, about your baby's development and your own pregnancy risks. It adds to, rather than replaces, your NHS care and the 20-week scan.

Combined screening at The Pregnancy Clinic

Combined screening brings together your age, the nuchal translucency and two blood markers (PAPP-A and free β-hCG) to give an individual chance for Down's, Edwards' and Patau's syndromes. In the NHS it finds around 85 in 100 pregnancies with Down's syndrome.

At The Pregnancy Clinic, your consultant also checks three **additional scan markers**:

- **Nasal bone:** often not yet visible in babies with Down's syndrome, but present in almost all unaffected babies.
- **Ductus venosus:** a small blood vessel whose flow pattern can be abnormal in babies with chromosomal or heart conditions.
- **Tricuspid valve:** a leak across this heart valve (tricuspid regurgitation) is more common in babies with Down's syndrome or heart defects.

Adding these markers to combined screening raises detection to around 95 in 100, while reducing false alarms to about 2 to 3 in 100.

Screening test	Approximate detection of Down's syndrome
Combined screening (NHS)	85 in 100
Combined screening with additional markers (The Pregnancy Clinic)	95 in 100
NIPT	99 in 100

Detection rates are approximate and vary between studies and screening programmes.

NIPT analyses DNA from the placenta in your blood. It finds around 99 in 100 pregnancies with Down's syndrome, with very few false alarms, and can be added to your scan. It is still a screening test and does not look at your baby's anatomy, so a detailed scan remains important alongside it.

What can be seen of my baby's anatomy at 12 weeks?

Some major conditions, such as an absent skull bone, major abdominal wall defects and some severe brain conditions, can almost always be seen at 12 weeks. Others, including many major heart defects, spina bifida, and some kidney and limb conditions, can often be seen by an experienced specialist. Some conditions only develop or become visible later, which is why the 20-week scan remains essential.

Is pre-eclampsia screening included?

Pre-eclampsia screening is an **optional add-on** that can be done at the same visit. It combines your medical history, a standardised blood pressure measurement, uterine artery Doppler and a blood test (PlGF). It identifies around 75 in 100 women who go on to develop preterm pre-eclampsia. If your risk is high, aspirin 150 mg at night, started before 16 weeks, reduces preterm pre-eclampsia by about 60%.

Why does chorionicity matter in twins?

Twins who share a placenta (monochorionic) are linked by blood vessels within it, which can lead to complications such as twin-to-twin transfusion syndrome. They need scans every 2 weeks from 16 weeks, compared with about every 4 weeks from 24 weeks for twins with separate placentas. Chorionicity is most reliably determined at the 11 to 14-week scan, so it is an important part of the 12-week scan in every twin pregnancy.

Why early information matters

When everything looks normal, a detailed 12-week scan gives valuable early reassurance. If a concern is found, you have more time for genetic tests, specialist advice and planning, rather than waiting until the middle of pregnancy for the first detailed look at your baby.

Does a normal scan mean everything is normal?

A normal detailed scan is reassuring, but it cannot rule out every condition. Some only become visible as your baby grows, and some genetic conditions have no signs on a scan. The 20-week anatomy scan therefore remains an essential part of your pregnancy care.

Book an appointment

Our consultant-led 12-week scan includes a detailed check of your baby's anatomy and heart, combined screening with additional markers, and optional pre-eclampsia screening or NIPT, with your results explained on the day.

Call: 01732 647072

WhatsApp: 07572 929888

Email: appointments@thepregnancyclinic.com

Online: thepregnancyclinic.com

Our 12-week scan

Our website

Urgent concerns: we provide planned appointments only. If you have pain, bleeding or any other urgent concern, please contact your local NHS maternity unit, early pregnancy unit or NHS 111. Or call 999 in an emergency.

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This leaflet gives general information and does not replace individual medical advice. Please ask us if you would like it in another format.

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