Patient Information Service

Kypros Nicolaides fetal medicine centre

Antenatal ultrasound scans, screening and diagnostic tests

Southend University Hospital NHS Foundation Trust
What type of tests are offered during my pregnancy and why?

There are two types of test, screening and diagnostic. Screening tests will tell you if there is a low or a high risk of your baby having a chromosomal problem, a diagnostic test would be able to confirm it. If necessary, additional ultrasound screening can monitor your baby’s growth and wellbeing. A diagnostic test is invasive and has a risk of miscarriage so it will only be offered either if a screening test gives a high risk of Down’s syndrome or if you have a family history or a previous baby with a genetic or chromosomal problem.

This leaflet explains a screening test called an antenatal ultrasound scan. You will be offered this scan at appropriate times during your pregnancy. The scans are undertaken at the Kypros Nicolaides fetal medicine centre at Southend University Hospital NHS Foundation Trust. This leaflet also outlines the diagnostic tests that may be offered; these would be discussed at length with you if a diagnostic test is indicated.

Choosing whether to have a screening test is an important decision in your pregnancy. If you have any questions about the screening tests, please talk to your midwife.

You may find it useful to read this leaflet together with the National Screening Committee (NSC) booklet, Screening tests for you and your baby. Please ask for a copy if you have not already received one.

Kypros Nicolaides fetal medicine centre is a clinical unit and research centre where we assess and treat unborn babies. We have specially qualified doctors and midwives who care for more than 3,500 women each year.
This leaflet also gives details of the diagnostic tests we offer

1. SCREENING TESTS (offered to everyone)

When will I be offered a scan?

We offer two routine ultrasound scans at

- between 11 to 14+0 weeks* (the nuchal scan)
- between 18 and 22+0 weeks (mid pregnancy or anomaly scan).

* Although we have stated approximate dates, your baby needs to have a Crown Rump Length (CRL) of between 45mm and 84mm, which is usually between 11+2 and 14+1 although this can vary; baby’s size is more important than gestation.

What will the 11 to 14 weeks scan tell me?

- **How many weeks pregnant you are.** This is done by measuring your baby; we estimate both age and the expected date of birth. This is helpful if you are unsure about the date when you became pregnant, you have an irregular menstrual cycle (period), or you have conceived while breastfeeding or soon after stopping certain type of contraception

- **Pregnancy viability.** Unfortunately, about three per cent of women who have a scan between 11 to 14 weeks find that their baby has died. This may have happened several weeks earlier and without any warning signs. If this is the case, we will offer you counselling about the possible causes and what this may mean for any future pregnancies
• At this stage, about one per cent pregnancies are found to have an abnormality. If we find a problem, we will discuss with you how serious it is

• **How many babies you are expecting.** About two per cent of natural conceptions and ten per cent of assisted conceptions result in twin or multiple pregnancies. If this is the case, you will be offered appropriate care throughout your pregnancy

• **Your risk of having a baby with Down’s syndrome or other chromosomal abnormalities.** At 11 to 14 weeks scan we offer you a combined screening test. This assesses your baby’s chance (risk) of having Down’s syndrome by looking at a number of things together:

  • your age, weight and ethnicity
  • if you smoke
  • have diabetes
  • the level of two hormones – PAPP-A and β-hCG in your blood
  • a detailed ultrasound scan that measures:
    • the amount of fluid behind your baby’s neck (nuchal translucency).

If you do not want to know the risk of your baby having a chromosomal abnormality such as Down’s syndrome, please tell us before you have a scan and what information you would like to know.

A low risk result (the nationally agreed cut off for a low risk result is 1:150) will be sent to you by letter. You will be contacted for a high risk result by telephone to discuss your options.

Combined screening on its own cannot rule out the chances of your child having a baby with Downs’s syndrome; it can only estimate the risk.
In most cases, the findings will be reassuring. In a minority of cases, it will show an increased risk of having a baby with Down’s syndrome, although most of these babies will not be affected. This is called a false positive.

If you are found to be between 14+2 and 20+6 weeks gestation you will be offered second trimester screening test for Down’s syndrome as the combined screening can only be used if your baby measures below a certain size (CRL 45mm to 84mm) and if you are over 14+1 your baby will probably be too big.

What will the mid pregnancy or anomaly scan tell me?

This scan checks:

• your baby’s growth

• your baby’s anatomy, including their brain, face, spine, heart, kidneys, hands, feet

• the position of your placenta

• the amount of amniotic fluid around your baby.

Scan to check length of cervix.

We also offer you an internal (vaginal) scan to measure the length of your cervix (neck of your womb). A long cervix means that you have a low risk of having your baby before it is due (preterm). A very short cervix may mean you have an increased risk of having your baby early. If the scan shows that you are at increased risk, we will monitor you closely and offer you treatment that makes this less likely to happen.
We will discuss the findings of this scan with you in detail and arrange for you to have more care if you need it.

2. ADDITIONAL SCREENING TESTS (offered in some circumstances, to monitor your baby’s growth)

Will I need more scans?

If all your scans are normal, you will probably not need any more. However we sometimes offer you extra scans during your pregnancy to check your baby is well. Reasons for having more scans include:

• having had a small baby in previous pregnancy
• medical problems such as diabetes
• your baby appearing to be small
• being pregnant with twins or triplets
• having a low-lying placenta at your mid-pregnancy scan
• dilated renal pelvis (possible kidney problem).

3. DIAGNOSTIC TESTS (to test for chromosomal abnormalities)

Why have I been offered a diagnostic test and what is involved?

You have been offered a diagnostic test because a routine screening test has indicated that there may be a high risk of your baby having a chromosomal abnormality.
A diagnostic test involves having a needle gently inserted into your womb (uterus) to remove a sample of fluid or tissue. It is your decision whether you feel that the risk of your baby having a chromosomal abnormality is high enough to have these tests. Your doctor or midwife will discuss this with you.

You may also find it helpful to read the NSC leaflet, *Screening tests for you and your baby*, for more detailed information about the tests.

Here we give a brief description of what they involve, their benefit and their risks

**Chorionic Villi Sampling (CVS)**

**What happens during a CVS?**

It involves gently inserting a thin needle into your womb and taking a sample from your placenta. You can have this procedure between 11 weeks and six days and 15 weeks and six days of pregnancy.

**What are the benefits?**

It can confirm whether or not your baby has a chromosomal abnormality. It can also be done earlier in pregnancy than an amniocentesis.

**What are the risks?**

There is a one per cent risk of miscarriage with CVS.
Amniocentesis

What happens during an Amniocentesis?

It involves gently inserting a thin needle into your womb and taking a sample of the amniotic fluid that surrounds your baby. You can have this procedure from 16 weeks of pregnancy.

What are the benefits?

It can confirm whether or not your baby has a chromosomal abnormality.

What are the risks?

There is a one per cent risk of miscarriage with amniocentesis.

What will results of CVS or amniocentesis show?

The test result may come in two parts. The first, called the QF-PCR, shows the most common chromosomal abnormalities, including Down’s syndrome, and is available within three working days. The second test which may or may not be requested is called a Micro-Array and will give you an analysis of all your baby’s chromosomes and is available after two to three weeks.

Key things to remember:

It is your choice whether or not to have the screening or invasive tests we describe in this leaflet.

Although ultrasound is a way of screening for abnormalities, it cannot always give a clear ‘yes’ or ‘no’ answer about your baby’s health.
The first scan at 11 to 14 weeks gives you the chance to confirm your pregnancy. It also includes the option of screening for Downs’s syndrome

**Care provided by students**

Southend University Hospital NHS Foundation Trust is a teaching hospital where students get practical experience by treating patients. Please tell your doctor or midwife if you do not want students to be involved in your care. Your treatment will not be affected by your decision.

**PALS**

The Patient Advice and Liaison Service is a service that offers support, information, and assistance to patients, relatives and visitors. They can also provide help and advice if you have a concern or complaint that the staff have not been able to resolve for you.
If this leaflet does not answer all of your questions, or if you have any other concerns please contact the fetal medicine centre on: 01702 385308.

www.southend.nhs.uk

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