Pregnancy

FETAL TESTING

Congratulations on your pregnancy!

All pregnant women are offered two ultrasounds (sonograms) during pregnancy to make sure that the fetus is developing normally. It is of course your own decision as to whether you want to accept these services and other examinations during your pregnancy. As a general rule, you will be scanned externally on your stomach. The scan does not have any risks for you or the child.

THE FIRST ULTRASOUND
around weeks 11-13

During the first trimester ultrasound, we examine:

• whether the fetus is alive
• whether there is one or more fetuses
• how far along you are in the pregnancy

– and we set an expected due date.

THE SECOND ULTRASOUND
around weeks 18-21

During the second trimester ultrasound, we examine:

• the fetus’ organs (kidneys, heart, lungs, etc.)
• the placenta’s placement in the uterus
• whether the fetus is growing as it should

The tests can show:

• whether there are signs that the fetus might have a chromosomal abnormality
• whether there are signs of malformations, such as heart defects

If you want to know whether the fetus has a chromosomal abnormality such as Down’s syndrome, the fold at the back of the fetus’ neck will also be scanned (nuchal translucency or NT screening). The size of the nuchal fold – together with a blood test and your age – can show the likelihood of a chromosomal abnormality. A chromosomal abnormality can mean that the child will be born with mental or physical disabilities and may not develop normally.
**Probability of chromosomal abnormality**

During the first pregnancy consultation, your family doctor will ask you, among other things, whether you want to be tested to find out if the fetus can have a chromosomal abnormality. If you say yes, a blood test will be drawn. You are not consenting to more tests or interventions. You can decide each time you are offered new tests.

At the hospital, the probability that the fetus has a chromosomal abnormality will be calculated based on the blood test, the size of the fetus’ nuchal fold, and your age. You will receive the results during your first ultrasound around weeks 11-13. You will be told whether there is low or increased probability that the fetus has one of the conditions, which are screened for.

**POSSIBLE RESULTS**

**Low probability**
- that the fetus has a chromosomal abnormality. Almost all pregnant women (95%) have low probability.

**Increased probability**
- that the fetus has a chromosomal abnormality. Even if there is increased probability, it is still most likely that the fetus has normal chromosomes. The probability is increased when it is 1 in 300 or more, such as 1 in 50. A probability of 1 in 300 means that the fetus has normal chromosomes in 299 cases and only 1 case of 300 has a chromosomal abnormality. If the probability is increased, you will be offered further testing.

If the results show increased probability that the fetus has a chromosomal abnormality, you will need to decide whether you want to know more about the fetus’ condition.

**Further testing**

If increased probability of chromosomal abnormality is found, or if the ultrasound raises suspicions of a malformation, you will be offered further testing.

You can feel more secure if all tests are normal – but there are no guarantees that the child will be healthy at birth. It is impossible to screen for everything – and you cannot find everything you screen for.

You should also know that screenings sometimes show that the fetus might have a problem, but that it is impossible to say with certainty. You may therefore be confronted with difficult considerations and complicated choices.
Here are some of the tests you may be offered:

**Blood test (NIPT)**
In the mother’s blood you can find genetic material (DNA) from the fetus. With a regular maternal blood sample it is possible to examine the probability for the most common chromosomal abnormalities. NIPT poses no risks to the mother or child.

It is not possible to discover all chromosomal abnormalities with NIPT, but the test has good certainty for the three most common, which are Down’s syndrome, Edwards syndrome, and Patau syndrome.

**Chorionic villus sampling (CVS) or amniocentesis**
Depending on how far along you are in your pregnancy, it is possible to take a sample of the placenta (CVS) or the amniotic fluid (amniocentesis) to test the fetus’ genetic material. The testing takes place at the hospital. You will be scanned externally on your stomach while a thin needle is inserted through the skin of your abdomen. It feels like a needle stick. A little amount of placental tissue or amniotic fluid is aspirated through the needle. The sample will be sent to analysis, and all the fetus’ chromosomes will be examined. You will be told when the results will be ready.

There is a small risk of miscarriage connected with chorionic villus sampling and amniocentesis. This occurs during less than 1 out of every 200 tests (under 0.5%).

Chorionic villus sampling and amniocentesis can show whether the fetus has normal chromosomes, or whether it has a chromosomal abnormality.

**Test results**

If everything is fine
If the results show that everything looks normal, your pregnancy will continue with the planned consultations and screenings.

If there are abnormalities
If the results show that something is abnormal, you will be offered counseling at the hospital.

During the counseling, you will receive information about what it means to have a child with the disease or disability your child will be born with. You can also receive counseling about the possibilities for treatment after the birth. You can also speak with a social worker in your municipality about the help and support you can get after your child is born.

If you are interested, you can be placed in contact with parents of children, who have the same disease or disability, and with relevant organisations, who can give you more information.

It is the woman’s right to decide how to proceed, if the test results show that something is abnormal. The doctor will advise you about the possibilities you have in your specific situation. Your choice will be respected and supported.

If termination comes into question
The fetus can be gravely ill, or have a malformation or disability that leads you to consider terminating the pregnancy. This is a difficult decision, and you will be offered advising before and after any intervention. If you want to abort after the 12th week, the doctor will apply for permission from the regional abortion council, which will consider whether the pregnancy can be terminated.

**Landsforeningen Spædbarnsdød**
(Danish Stillbirth Association) supplies information materials and offers free counseling before or after a termination. See more at www.spaedbarnsdoed.dk