

# Amniotic fluid analysis

**During the course of amniocentesis, or the amniotic fluid test, samples are taken of the amniotic fluid. Most often it's done to investigate the chromosomes of the foetus and to identify possible chromosome disorders before birth.**

You will be referred to amniocentesis if the previous analyses performed on you (nuchal translucency test, double test, triple test) have indicated the increased risk of chromosome disorders or there are indications of chromosome disorders in your medical history.

Amniocentesis is optional and you have the final word in saying whether you want the procedure. Before the procedure you must sign an instrument of agreement.

## **How is amniocentesis performed?**

The cells of the foetus have to be inspected in order to perform genetic analyses. The foetus is located in the amniotic cavity, suspended in amniotic fluid. Skin cells and traces of metabolism can be found in the amniotic fluid. In order to analyse those cells, a small sample of the fluid is taken using a thin needle through the belly during an ultrasound. The cells from the fluid sample are suspended for a while in a special nutrient solution to grow, then the multiplying cells can be inspected under a microscope. The final results of the analysis will arrive in three weeks.

## **When is the optimal time to perform amniocentesis?**

Amniocentesis is usually performed during the 15<sup>th</sup> to 20<sup>th</sup> week of pregnancy, but it can be performed later. The safest time is considered to be the 16<sup>th</sup> to 17<sup>th</sup> week of pregnancy.

## **Does the procedure hurt?**

The procedure may feel uncomfortable, but most women don't find it more painful than taking a blood test from the vein. After the procedure you may feel some tension in the stomach, which is normal.

## **What are the risks involved with amniocentesis?**

Amniocentesis is a fairly common procedure and complications are rare. For most women the information gained outweighs the risks involved.

- The risk of miscarriage is increased by approximately 0.5-1% with amniocentesis. The exact reason for this is unknown. Over 99% of the pregnancies continue without issues.
- An aseptic (sterile) method is used for the test to avoid infections, but nevertheless inflammations may occur on rare occasions in the form of fever, contractions of the uterus and stomach pains.
- Rhesus negative women (RhD<sup>-</sup>) have an increased risk of blood cells of the foetus transferring to the blood circulation of the pregnant woman, leading her to develop antibodies. To reduce this risk, an antibody injection is done if necessary, which reduces the risk of immunization against the foetus.
- The results of amniocentesis arrive in three weeks after the procedure. At first you are notified of the results via telephone and after a few days, the written results reach your gynaecologist or midwife. The results give information about the tested disorders. If the results indicate that the foetus has a genetic disorder, the results and further steps are explained to you. According to Estonian law, the termination of pregnancy on medical grounds is allowed for up to 21 weeks of pregnancy. If you decide to abort the pregnancy, you will need to turn to a doctor or a midwife for additional information.

## **What to note?**

If you have strong stomach pains, bleeding, extensive discharge or a fever after the test, you should immediately turn to a doctor on duty at the emergency room of the women's clinic.