

ULTRASOUND SCREENING EXAMINATIONS DURING PREGNANCY

Women's Hospital, Kätilöopisto Maternity Hospital, Jorvi Hospital

Dear expectant mother

The aim of the examinations carried out at maternity health clinic and maternity outpatient clinic in maternity hospital is to determine if your pregnancy has proceeded normally and to provide you with information regarding possible risk factors. Each pregnant woman hopes that the fetus develops normally and the child is born healthy. Unfortunately, this is not always the case. Some abnormalities can be determined via fetal examinations. However, there are many abnormalities and illnesses that cannot be determined through pregnancy screening methods.

You are provided with an opportunity to participate in two ultrasound examinations during your pregnancy. Both examinations are voluntary and free of charge. More information pertaining to the examinations is available to you also at the maternity health clinic.

1. The early pregnancy ultrasound scan and/or screening for chromosomal disorders

The early-pregnancy ultrasound scan will be performed at the maternity outpatient clinic **between 10+0 and 13+6 weeks** by a specially trained midwife, either intravaginally or over the abdominal wall. The number of fetuses is determined and the duration of your pregnancy can be assessed more accurately than merely by using the time of your previous periods for information. The examination can include nuchal translucency screening and an overall inspection of fetal structures. A thick nuchal fold might be a sign of an increased risk of some chromosome disorder or structural abnormality.

The most common chromosomal disorder is Trisomy 21 or Down's syndrome. **Early pregnancy combination screening** is primarily used in screening for Down's syndrome. The combination method takes into account the mother's age, the nuchal translucency test result and results from blood tests. The results of this same test can also be used to estimate the risk of the more rare trisomy 18, also known as Edward's syndrome, and they are provided at the same time.

The examination involves taking a blood sample from the mother at week 9-11 of pregnancy, and measuring the size of the fetus (the head to bottom measurement) and nuchal translucency via an ultrasound scan at pregnancy week 11-13+6. If you choose to participate in the combination screening, you should give a blood sample at the laboratory prior to the ultrasound scan. It is best to go to the laboratory after pregnancy week 10 has passed, as ultrasound scan results determining the duration of pregnancy may vary from the estimated due date calculated from the last onset of menstruation. The combination screen detects over 80 per cent of above-mentioned chromosomal abnormalities.

Major structural abnormalities can be detected in the early pregnancy ultrasound scan. If the fetus is confirmed as having accentuated nuchal edema or structural abnormality, you will be provided with further information, and if necessary further examination will be arranged.

If you did not have an early pregnancy combination screening, Down's syndrome can be tested with a **second trimester screening based on blood tests carried out between 15 and 16+6 weeks of pregnancy**.

The results of the chromosomal abnormality screening will be sent to you in the post. If the results show an increased risk, you will be directly contacted by the Women's Hospital Prenatal Diagnostic Unit by letter or telephone.

2. A structural ultrasound scan

The structural ultrasound examination is an abdominal scan performed between **18 and 21** weeks of pregnancy by a specially trained midwife at the maternity outpatient clinic. Approximately 3 out of 4 cases with major structural abnormalities are detected using this examination. During this examination, "minor ultrasound markers" might be detected. These markers are linked with a mildly increased risk of chromosomal disorders. Should the ultrasound examination reveal an abnormality, you will be referred to further examinations¹.

A structural ultrasound scan may also be performed later on, between 24 and 26 weeks of the pregnancy. However, at this stage termination is no longer possible, even if a major structural abnormality is discovered.

¹Further examinations related to ultrasound examinations

If the ultrasound examination reveals some abnormality, the parents will have the opportunity to meet a specialist physician for discussions about the significance of the findings and about further examination at the Prenatal Diagnostic Unit of the HUCH Women's Hospital. Should further examinations (ultra-sound scan performed by a specialist physician, possible examination of the placenta or amniotic fluid) confirm that the fetus has a developmental disorder, the degree of the disorder and its significance for the health of the nascent child will be explained to the parents in the greatest possible detail. The family will then be given the opportunity to prepare for birth of an afflicted child or to decide on termination of the pregnancy, permitted under Finnish law until the 24th week of pregnancy.

Overview

A 30-minute appointment is scheduled for an ultrasound scan. Please note that there are a limited number of available parking spaces. Using public transportation is highly recommended.

During the examination you may, if you wish, be accompanied by your spouse or a support person, but children may not be present, as concentration and calm is required for the examination to be performed properly.

Contact information

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