

INFORMATION ABOUT FIRST TRIMESTER SCAN (11⁺⁰ -13⁺⁶ WEEKS OF GESTATION)

What is an ultrasound scan?

Ultrasound scanning is an imaging technique allowing the visualization of parts of the body by using high-frequency sound waves (ultrasound, not audible by human ear) able to go through the tissues. When the sound waves reach the fetus, echoes are produced and transformed into images on the ultrasound machine screen.

How is the scan performed?

Between 11⁺⁰ and 13⁺⁶ weeks of gestation the first trimester scan is most often performed trans-abdominally. However, the need to perform also a trans-vaginal evaluation cannot be excluded.

What are the aims of the 11⁺⁰ – 13⁺⁶ weeks scan?

The main aims of the 11⁺⁰ – 13⁺⁶ weeks scan are the following: to check fetal viability, to measure the nuchal translucency and to evaluate basic fetal anatomy. Moreover, the combined test for the most common fetal trisomies will be offered to those patients opting for such risk assessment. If not evaluated at earlier gestational ages, during this scan the pregnancy dating could be assessed, just as the number of fetuses and, in case of twins, the number of amniotic sacs (amnionicity) and placentas (chorionicity).

What is the Nuchal Translucency (NT) measurement?

The NT measurement should be routinely performed for all pregnant women. It is the measurement of the subcutaneous tissue thickness at the level of the fetal nape. It should be performed between 11⁺⁰ e 13⁺⁶ weeks of gestation by certified operators following the appropriate methodological protocol and undergoing regular audits. A normal NT measurement reduces the risk of fetal anomalies, whereas an increased NT thickness represents a marker for genetic conditions including the most common trisomies (e.g. trisomy 21, 18 and 13) and structural abnormalities (cardiac and extra-cardiac anomalies).

What is the basic anatomy evaluation of the first trimester?

Major fetal structural abnormalities could be already suspected at such early stage, and referred for detailed evaluation and, if confirmed, further management of the structural anomaly. However, it should be highlighted that, at such early stage, the fetal anatomy evaluation could be significantly limited by maternal factors such as obesity or increased abdominal wall thickness. Moreover, the second trimester screening scan for fetal anomalies remains the most accurate and recommended examination to detect fetal structural anomalies.

In which cases a detailed evaluation of the fetal anatomy should be provided in the first trimester?

All cases with a suspected structural anomaly or with nuchal translucency thicker or equal to 3.5mm at the 11+0 e 13+6 weeks screening scan should be sent to a referral center for a detailed evaluation of the fetal anatomy by expert operators.

INFORMED CONSENT TO THE FIRST TRIMESTER (11+0 E 13+6 WEEKS) SCAN

I hereby (name, surname) _____ declare that:

- I have been correctly informed about first trimester ($11^{+0} - 13^{+6}$ weeks) ultrasound screening and understood the contents of this information.
- I had the opportunity of clarifying my doubts with a doctor and all my questions were satisfactorily answered.
- I am aware that this examination is suggested but not mandatory and I would like to undergo the examination aware that the first trimester ($11^{+0} - 13^{+6}$ weeks) scan might identify fetal anomalies requiring further diagnostic examinations.

Date

Patient's signature