



INFORMATION AND CONSENT TO THE SCREENING ULTRASOUND EXAMINATION OF THE FIRST QUARTER OF PREGNANCY

What is ultrasound?

Ultrasound is a technique that allows us to see the organs of our body with the use of high frequency sound waves (ultrasounds, inaudible to the human ear) that pass through the tissues: when they reach the fetus they produce echoes that are transformed into images on the ultrasound monitor.

Why Do I Trimester Screening Ultrasound?

The reasons for which an ultrasound is proposed in the first trimester are the detection of vaginal bleeding and / or pelvic pain, a possible difference between the development of the uterus detected at the visit and the expected volume for the gestational age reached, the dating of the pregnancy in case of menstrual irregularities, the request for invasive prenatal diagnosis, or even the condition of low-risk pregnancy in the absence of specific indications. Particular indications are screening for Down syndrome (see below) or an evaluation of the fetal anatomy (the latter can be carried out only in case of specific malformative risk, not routinely, in dedicated clinics by operators experienced in this type of evaluation.). It is emphasized that this ultrasound examination is recommended but not mandatory and the assisted person, after having been informed by the attending physician, will be able to decide whether to carry out it or not.

How is the exam carried out?

The examination is proposed and carried out in most cases by the trans-vaginal route (through the insertion into the vagina of a probe covered by a disposable cover); it is a completely painless test (at most it can cause a slight discomfort) and without side effects. For the evaluation of nuchal translucency, the examination is carried out transabdominally in most cases.

What is seen with ultrasound in the first trimester of pregnancy?

After placing the probe in the vagina, the Doctor proceeds to visualize the implantation of the ovular chamber / gestational sac, to visualize the presence of the embryo / fetus and its cardiac activity. With this examination it is possible to perform the dating of the pregnancy, the diagnosis of twin pregnancy with the determination of its Chorionicity, and the search for any uterine and / or adnexal anomalies. In the presence of suspicious ultrasound pictures (absence of the ovular chamber in the uterus, suspected internal abortion, suspected extrauterine pregnancy) it may be necessary to schedule an ultrasound examination at another date and possibly other tests (eg HCG blood test). It should be noted that the diagnosis of possible pathologies of pregnancy of the first trimester is not always possible during the first ultrasound examination and some of these diagnoses are not always feasible with a high degree of reliability (eg. Ectopic pregnancy)

Is it possible with the ultrasound to detect fetal abnormalities in the first trimester?

The study of fetal anatomy is currently not included among the purposes for which this ultrasound examination is routinely performed. An occasional survey of a suspicious ultrasound picture must be investigated at a reference center for the study of fetal pathologies.

Is it possible with ultrasound to suspect genetic abnormalities?

The evaluation of nuchal translucency (i.e. of the thickness of the nuchal tissues of the fetus) in the context of screening tests for trisomy 21 (see dedicated information and consent form) can be carried out between 11 and 13 weeks of gestational age: in this regard, reminds that this assessment, which is part of the risk calculation systems of the combined and integrated screening tests, can only be carried out to women who, informed, request it, after booking this investigation in dedicated clinics by operators who have received a adequate theoretical and practical training, and are subjected to periodic quality checks. A first trimester ultrasound performed routinely or for other reasons therefore does not include among its objectives the assessment of the thickness of the nuchal translucency which requires an information process and a separate examination planning.

Is ultrasound harmless to the fetus?

Ultrasounds have been used in obstetric practice for over thirty years and no harmful effects have been reported, even in the long term, on the fetus. For this reason, with the procedures adopted today, the diagnostic use of ultrasound is considered risk-free. In the first trimester it is not recommended to use color or pulsed doppler to detect cardiac activity (so "listen to the heartbeat of the embryo") up to 10 weeks of gestational age