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ULTRASOUND DURING PREGNANCY

DESCLOSURE AND SELECTION

Most children are born healthy. Nevertheless, all women of any age have a 1-2% chance of their child being affected by a mild to severe physical or genetic abnormality.
Many of these can be detected prenatally through ultrasound examinations; some, however, can only be detected through special examination procedures, others not at all.

In general, the informative value of ultrasound diagnostics is limited. A further magnetic resonance examination may be helpful. Even with the greatest care and experience, malformations in the child can remain undetected.
This is particularly true when examination conditions are difficult, e.g. when visibility is significantly restricted. It is also possible that an inconspicuous genetic screening does not guarantee the delivery of a healthy child.

It is up to you to decide which tests to have. The following information is intended to support you in this decision:

Ultrasound as part of the Mutter-Kind-Pass

The costs of these examinations are covered by social insurance:

Basic ultrasound 8th-12th week of pregnancy:
Objective of this examination:
The confirmation of the correct localization of the pregnancy in the uterus, presence of foetal heart action, detection of singleton or multiple pregnancies and determination of gestational age by measuring the crown-rump length of the foetus.
Basic ultrasound 18-22 weeks of pregnancy:
The aim of this examination is to assess cardiac activity, growth, placental position and amniotic fluid volume.
Basic ultrasound 28-32 (30-34) weeks of pregnancy:
Objective of this examination:
The assessment of cardiac activity, growth, placental position, amount of amniotic fluid and position of the baby.

In my practice, you will receive an ultrasound examination at every check-up. These examinations are for orientation purposes regarding the detection of gross abnormalities and malformations and NOT for the diagnosis of malformations.
It is possible that findings that only concern biometric data do not indicate malformations and can therefore be overlooked.

In addition to this, there is therefore an extended range of examinations.

Extended perinatal diagnostics:

The costs of these examinations are NOT covered by social insurance.
Prenatal diagnostics are conducted by specially trained staff and with particularly high-quality ultrasound equipment.

These examinations include standardized procedures that enable the following, among other things:

1. detection of most severe organ malformations, which then enables targeted care of the child.
2. detection of signs of genetic abnormalities (the most common change here is trisomy 21 = Down's syndrome), with the possibility of initiating genetic clarification.
3. examination for placental dysfunction using special ultrasound technology (Doppler ultrasound) to be able to assess a growth restriction of the child or the maternal risk of pregnancy complications.

First trimester screening examination 11+6 - 13+6 weeks of pregnancy:

1. examination for early recognizable, serious abnormalities in the child.
2. assessment of the probability of the presence of the most common age-related genetic abnormalities (= trisomy 21, 18 and 13).
   This assessment is based on the age of the mother, the length of the crown-rump and the width of the nuchal skin (nuchal translucency) of the child in combination with certain hormone values in the maternal blood (= combined test) and, if necessary, other ultrasound details (e.g. nasal bone imaging, blood flow via the tricuspid valve and ductus venosus).

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Combined Test
In addition to ultrasound the combined test, so-called cell-free DNA tests (also known as non-invasive prenatal testing, NIPT) can be conducted as a particularly reliable risk assessment of the presence of trisomy 21, 18 or 13 in the unborn child based on cell-free fragments of placental genetic information (DNA) in the mother's blood.

You can have this test - **NIFTY Test (from gestational week 10+1/ 9+1) – at my practice.**

Chorionic villus sampling (CVS) and amniocentesis
Exclusion of most genetic abnormalities (e.g. trisomy 21) requires a genetic puncture (needle procedure via the maternal abdominal wall).
This can be conducted from the 12th week of pregnancy as a chorionic villus sampling (placenta puncture) or from the 16th week of pregnancy as an amniocentesis (amniotic fluid examination).
You will be referred to the University Clinic for Obstetrics and Gynaecology at Vienna General Hospital (AKH).

Pre-eclampsia screening
Pre-eclampsia is a pregnancy complication characterized by high blood pressure and other problems (e.g. restricted growth of the child). It affects approximately 2% of all pregnancies.
Pre-eclampsia screening can be used to assess the personal risk of developing pre-eclampsia later by means of a combination of ultrasound measurements of the uterine blood flow and blood pressure measurements.

Organ screening (20th - 24th week of pregnancy)
Pregnancy weeks 20+0 to 21+6 are the most suitable period to examine the child's organs in detail.
Any signs of chromosomal defects can also be assessed. This examination can detect most serious malformations or rule them out with a high degree of probability.

Please select the desired examinations from the list below:

☐ I would like to have the ultrasound examinations provided for in the mother-child pass, as well as at every visit to the practice

☐ I would like extended ultrasound examinations by a certified institute

☐ NIPT (NIFTY®) ☐ Nuchal translucency (NT) ☐ Organ screening

☐ I decline extended ultrasound examinations by a certified institute after individual clarification.

I have read, understood and taken note of the above information on ultrasound examinations during pregnancy and confirm this with my signature.

_____ _____
patient and NAME IN CAPITAL LETTERS physician

References:
Österreichische Gesellschaft für Gynäkologie und Geburtshilfe Österreichische Gesellschaft für Ultraschall in der Medizin – Arbeitskreis für Geburtshilfe und Gynäkologie der Österreichischen Gesellschaft für Ultraschall in der Medizin – ÖGUM Arbeitsgemeinschaft für bildgebende Verfahren der Österreichischen Gesellschaft für Gynäkologie und Geburtshilfe – OEGGG für den Arbeitskreis Geburtshilfe und Gynäkologie der ÖGUM: assoz. Prof. Priv.-Doz. Dr. Philipp Klaritsch, Graz, Dr. Martin Metzenbauer, Wien
Für die Arbeitsgemeinschaft für Bildgebende Verfahren der OEGGG: Priv.-Doz., Dr. Dagmar Wertaschnigg, Salzburg, assoz. Prof. Priv.-Doz. Dr. Philipp Klaritsch, Graz
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