Schweizerische Gesellschaft für Ultraschall in der Medizin
Sektion Gyn/Geb (SGUMGG)

Societé Suisse d'Ultrasons en Médicine
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Pregnancy ultrasound – what you should know

Ultrasound is the only technique we have for directly observing the unborn child in the womb. It has been used in pregnant women for over 40 years, and there is no evidence as yet of any adverse effect on mother or child. Swiss health insurance funds fully cover routine scanning at around 11 and 20 weeks of gestation, plus (minus an excess) any other scans prescribed by your doctor.

Ultrasound scanning is designed to answer the following questions:

In the first third ('trimester') of pregnancy (weeks 11–14 of gestation):
- Is the baby alive and in the right place in the womb?
- When did the pregnancy start? It is very important to be able to date your baby's age, e.g. in late pregnancy for assessing whether its growth is delayed
- Is it a single or multiple pregnancy?
- Can severe malformation be excluded?
- Does the nuchal translucency (NT) value point to a possible chromosomal disorder (e.g. Down's syndrome)?

In the second trimester, at weeks 20–23 of gestation:
- Is amniotic fluid volume normal?
- Is your baby growing normally?
- Is any serious malformation present?
- Where is the placenta located?

If the ultrasound scan is normal, you can be pretty certain that everything is really OK. But does a normal scan guarantee a healthy baby? **No**, it cannot.

Ultrasound is ideal (90% accurate) in detecting very serious problems (that could affect your child's survival). It is pretty good (75% accurate) at detecting problems that require intensive care and treatment. However, it does not score highly (30% accurate) in detecting minor malformations (e.g. extra fingers), as such details cannot always be visualised. Also we may sometimes detect subtle changes, such as the shape of the head, which themselves have no disease value, but can point to a particular disease. If subsequently we're able to exclude that particular disease, then this marker loses all significance.

Bear in mind too that some developmental abnormalities only emerge during pregnancy and for that reason may not be detectable in the first half of pregnancy. A normal scan influences your subsequent obstetric care and you may also find it strongly reassuring. If the scan reveals a problem, it provides an important basis for decision-making, both for you and for us. It may, for example, prepare you for the birth of an unwell child. Delivery can be planned at a suitable centre. Occasionally we might be able to treat your unborn child and substantially improve its state of health.

However, an ultrasound may confront you with an ethical dilemma if it reveals a serious fetal abnormality: "Should I continue the pregnancy or have a termination?" Many prefer to evade such dilemmas in general and let Nature take its course.

So please let us know if for personal reasons you would prefer not be to be scanned. If anything is unclear or if you have questions we'll be glad to provide you with more information.