



## Ultrasound in pregnancy – What you should know

Ultrasound is the only method to observe the unborn child directly in its mother's womb. Ultrasound has been used in pregnancy for over 40 years and to date no direct harmful effect on mother or child has ever been discovered. Only two ultrasound screenings, one around 11 weeks and one around 20 weeks, are fully covered by Swiss medical insurance. Any further ultrasound scans must have a medical indication for reimbursement by your health insurance (Krankenkasse / caisse maladie / cassa malati) and are subject to the terms of the contract with your insurance company pertaining to illness.

Screening ultrasound in pregnancy assesses the following points:

For the **first trimester** (11 to 14 weeks):

- is there a living child;
- is the pregnancy in its correct place, inside the uterus;
- determine the exact age of the foetus by its size. This can only be done in early pregnancy and is a prerequisite for the assessment of foetal growth in later pregnancy;
- recognise multiple pregnancy (twins, triplets etc.);
- exclude severe malformations;
- measure nuchal translucency. This can be used to assess the probability of the baby being afflicted by a numeric chromosomal anomaly such as the one that leads to Down's syndrome.

For the **second trimester** (20 to 23 weeks):

- the baby's size to indicate how it is growing;
- the amount of amniotic fluid;
- the position of the placenta within the uterus;
- discover severe foetal malformations.

If the result of the ultrasound screen is normal you may conclude that, very likely, everything really is completely normal. But does this in effect guarantee a perfectly healthy child at birth? **No!** Unfortunately this is not the case.

Ultrasound is very good (sensitivity 90%) at discovering severe malformations, situations in which it is not sure whether the child can survive at all. Ultrasound is fair (sensitivity 75%) at discovering problems where the child is likely to survive, given the proper intensive supervision and treatment. But only about 30% of lesser anomalies such as supernumerary digits (ie a sixth finger or toe) will be discovered on screening ultrasound because they can simply not be visualised during the scan. Please note that sometimes a subtle feature such as an unusual shape of head is discovered, which in itself is not pathological but is considered a leading sign for a more complex condition. If it is possible to rule out this condition then the unusual feature has no significance either. It is important to realise that some anomalies develop much later in pregnancy and can therefore not be detected by the ultrasound screenings performed in the first half of pregnancy.

A normal screening result can be very reassuring to you. It influences the nature of the obstetric care provided thereafter. If an anomaly is discovered, this gives you and your obstetric care providers an opportunity to assess the situation in time, helping you make the right decisions and in taking further steps. Discovering an anomaly early, can help you come to terms with the situation that you are going to give birth to a child with a given medical problem. Appropriate measures for the delivery can be taken, enabling your baby to benefit from specialised medical care at birth and after. In some situations specific treatments in pregnancy can greatly improve the outcome.

The ultrasound scan might confront you with a severe malformation which may steep you into a deep moral conflict: "Should I let my pregnancy continue or should I consider terminating it?" Some people are decided to accept their babies unconditionally and do not wish to be confronted with such a con-



flict. It is very important for us to know where you stand. Please do not hesitate to inform us, if you prefer not to have ultrasound scans during your pregnancy.

Please ask if something needs clarifying or you need further information.

- I agree to have ultrasound scans performed on my baby
- I agree to have ultrasound scans performed on my baby but wish to make the following stipulations:
- I wish to refrain from ultrasound scans
- I have the following questions/objections: