The Fetal Assessment Center: The 11-13 weeks scan

This scan is carried out from 11 weeks to 13 weeks and six days. The scan is usually performed transabdominally but in a few cases it may be necessary to do the examination transvaginally.

Aims of the 11-13 weeks scan

- To date the pregnancy accurately. This is particularly relevant for women who cannot recall the date of their last period, have an irregular menstrual cycle, or who have conceived whilst breastfeeding or soon after stopping the pill. We measure the size of the fetus and from this we calculate the expected date of delivery.
- To assess the risks of Down's syndrome and other chromosomal abnormalities. Each woman will be given an estimate of her individual risk for this pregnancy. This is calculated by taking into account the age of the mother, measurement of two hormones in the mothers blood and the scan findings of nuchal translucency thickness, nasal bone, blood flow through the fetal heart and ductus venosus and fetal abnormalitites. Parents will receive full counselling concerning the significance of these risks and the various options for further testing.
- To diagnose multiple pregnancy. Approximately 2% of natural conceptions and 10% of assisted conceptions result in multiple pregnancy. Ultrasound scanning can determine if both babies are developing normally and if the babies share the same placenta which can lead to problems in the pregnancy. In such cases it would be advisable to monitor the pregnancy more closely.
- To diagnose certain major fetal abnormalities. Major abnormalities may be visible at this gestation but a 20 week anomaly scan is essential.
- To diagnose early pregnancy failure. Unfortunately, in 2% of women who attend for a nuchal scan it is found that the fetus has died, often several weeks before and without any warning. Couples will receive full counselling as to the possible causes of this problem and the options for subsequent measures that may be necessary.

Personalised risk for Down's syndrome

The vast majority of babies are normal. However all women, whatever their age, have a small risk of delivering a baby with a physical and/or mental handicap.

In some cases the handicap is due to chromosomal abnormality such as Down's syndrome.

The only way to know for sure whether or not the fetus has a chromosomal abnormality is by having an invasive test such as chorion villus sampling (CVS) or amniocentesis (amnio). However, these tests carry a risk of miscarriage of about 0.6% (for our unit).

It is up to you and your partner to decide whether or not the risk of the fetus having a chromosomal abnormality is high enough to warrant having an invasive test. As a guideline, an invasive test is usually offered if the risk of Down's Syndrome is 1 in 300 or above.

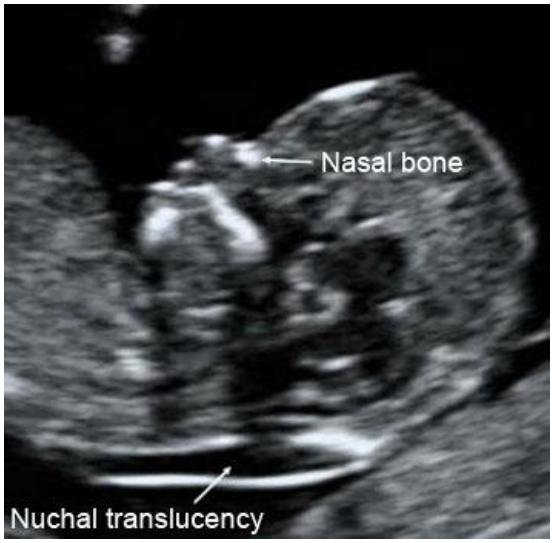
The most accurate way of estimating the risk of the fetus having Down's Syndrome is carried out at 11-13 weeks and depends on the:

- Age of the mother
- Amount of fluid behind the neck of the fetus (nuchal translucency)
- Presence or absence of the fetal nasal bone
- Fetal heart rate
- Blood flow through the ductus venosus in the fetal liver
- Presence or absence of any physical abnormalities
- Level of two hormones (free ß-hCG and PAPP-A) in the mother's blood

After the scan, on the basis of all the above factors, the estimated risk for Down's Syndrome will be discussed with you. Only you can then decide if you wish to have an invasive diagnostic test.

Irrespective of whether or not you decide to have an invasive test, it is recommended that you have a scan at 20 weeks to check for physical abnormalities.

Nuchal translucency and nasal bone



I have read and understand the NT information leaflet

Signed: ---------- Date: ----------