

Obstetric and Gynaecological Ultrasound in Mulgrave (formerly Diagnostic Women's Ultrasound), has provided specialist pregnancy and gynaecological ultrasound services to Melbourne's South East and the Dandenong region since 1989.

Dr Simon Meagher is an obstetrician/gynaecologist who has sub-specialised in ultrasound and prenatal diagnosis. He is the Director of Monash Ultrasound for Women, consultant staff specialist at the Mercy Hospital for Women and lecturer at both Melbourne and Monash Universities. He is well known for his clinical and procedural skills and academic achievements, having over 40 publications in local and international journals.

O & G Ultrasound provides a complete range of pregnancy and gynaecological ultrasounds and related procedures including prenatal genetic testing for Down Syndrome. Dr Meagher (obstetrician/gynaecologist/ultrasonologist), Associates and sonographers specialised in obstetric ultrasound, work with state of the art, high resolution ultrasound machines. Together with an experienced team of nurses and support staff, our aim is to provide you with the highest quality ultrasound service available.

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Nuchal Translucency Screening for Down Syndrome

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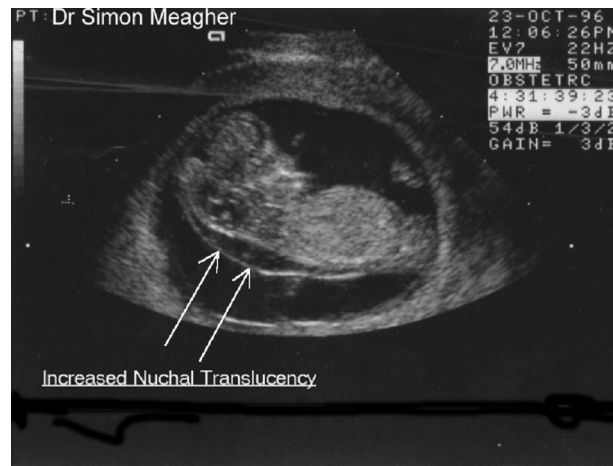
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What is nuchal translucency ?

The nuchal translucency is a fluid filled space behind the neck of the developing fetus. It is present in early pregnancy and can be measured by ultrasound examination between 11 to 14 weeks gestation. In babies with chromosomal abnormalities such as Down Syndrome, the nuchal translucency is often wider or thicker than normal.



This image shows a longitudinal section through the fetus at 12 weeks gestation. The arrows point to a thin nuchal translucency. After delivery this baby was shown to have normal chromosomes.



This image shows a longitudinal section through the fetus at 12 weeks gestation. The arrows point to a thick nuchal translucency. After testing this baby was shown to have Down Syndrome.

What are the benefits of having an ultrasound at 11-14 weeks ?

- The nuchal translucency can be accurately measured at this stage in pregnancy. Using this measurement, the mother's age and overall measurement of the fetus, the risk of carrying a Down syndrome fetus can be calculated.
- With improved ultrasound technology and transvaginal scanning, it is now possible to detect many physical abnormalities as early as 11-14 weeks, when they were previously only seen later in pregnancy.
- Accurate dating of the pregnancy
- Early diagnosis of twins
- Diagnosis of early pregnancy failure

How accurate is this marker for detecting Down Syndrome ?

Currently, the nuchal translucency is the most accurate of the non-invasive (ie. not involving needles) test for Down Syndrome during pregnancy. It can identify approximately 80-85% of babies with chromosomal problems, when performed by expertly trained, experienced operators. The detection rate may be improved when combined with maternal blood testing.

How are the results interpreted ?

The nuchal translucency is a **screening** test only. This means it tells you whether you are at **increased risk** of having a baby with Down Syndrome, rather than a definite 'yes' or 'no' answer. Some 'high risk' patients therefore choose to proceed directly to a diagnostic needle test such as CVS (Chorionic Villus Sampling).

For most low risk women however, the nuchal translucency risk estimation for Down Syndrome will provide a reassuring risk estimate and they therefore choose not to proceed with CVS or amniocentesis.

How is the 11-14 week scan performed ?

We usually recommend this ultrasound is performed internally (see Information leaflet on Transvaginal Ultrasound). This provides fine detail of the early anatomy of the developing fetus. If you prefer however not to have an internal scan, the nuchal translucency may be measured at transabdominal examination.

What happens if the nuchal translucency is increased ?

At the time of your ultrasound, you will be informed of your risk figures for having a child with a chromosomal problem. A risk figure of greater than 1 in 300 is considered a high risk result, and will occur in approximately 1 in 20 women. A high risk result does **not necessarily** mean that your baby has Down Syndrome. If your risk is increased, you will be offered genetic testing by CVS or Amniocentesis to ascertain the exact chromosomal make up of your baby.

OBSTETRIC & GYNAECOLOGICAL ULTRASOUND
is accredited by Kings College London, as a nuchal translucency screening centre.
All ultrasound personnel have been trained to the highest UK standard in this method of screening