Qscan RADIOLOGY CLINICS

Patient Information

Pregnancy

What is a Nuchal Translucency Ultrasound?
A nuchal translucency ultrasound is performed in the first trimester of pregnancy between 11 weeks 2 days and 13 weeks 6 days. It is usually performed as part of the combined first trimester screening test.

Combined first trimester screening
The combined first trimester screening test incorporates your nuchal translucency ultrasound with specific blood tests to determine the risk of your baby having certain chromosomal abnormalities, in particular Down syndrome, Patau syndrome and Edwards syndrome.

There is always a risk of having a baby affected by a chromosomal disorder such as Down syndrome. This risk increases with your age. The nuchal translucency assessment is a non-invasive way to detect 80-90% of babies with Down syndrome and also allows for the early detection of major fetal structural abnormalities.

What is the Nuchal Translucency?
The nuchal translucency is a fluid layer located under the skin at the back of your baby's head and neck. The nuchal translucency is always present during this stage of the pregnancy and appears as a black or translucent space on ultrasound.

The 'thickness' of the fluid may be increased in the presence of certain chromosomal abnormalities or major structural abnormalities. A thick nuchal does not always mean that there is a problem, but it does indicate an increased risk.

What happens during my Nuchal Translucency Ultrasound?
The Sonographer will apply a saline based gel to your lower abdomen and use an ultrasound transducer to obtain images of your baby.
The Sonographer will then perform the ultrasound component of the risk assessment, which includes:

- Measuring the nuchal translucency. This is done a number of times, with the most accurate measurement used for the risk calculation
- Determining the presence or absence of a nasal bone
- Measuring the length of your baby from head to bottom (crown-rump length)
- Measuring the fetal heart rate

The structural assessment of your baby is comprehensive, with detailed views of the following anatomy being part of our standard Qscan protocol:

- Head and brain assessment, particularly looking for early signs of spina bifida
- Extremities – arms and legs, hands and feet
- Stomach and bladder
- Spine
- Renal arteries and umbilical arteries
- Abdominal wall and diaphragm
- Initial heart assessment (only limited views are possible at this gestational age)

At this stage of the pregnancy we are also able to:

- Confirm your due date
- Diagnose multiple pregnancies
- Assess the location of your placenta and cervical length
- Assess the uterus and pelvic structures
- Diagnose early pregnancy failure

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Ultrasound

How is your risk calculated?
Your risk is calculated using a specific computer program based on data from the Fetal Medicine Foundation (FMF).

The following variables are used for the calculation:
- Nuchal translucency thickness
- Fetal heart rate
- The presence of a fetal nasal bone
- Gestational age of the baby
- Maternal age and background
- First trimester biochemistry (PAPP-A and Beta-hCG)

What do the results mean?
Your individual results from this screening test estimate the risk of your baby having a certain chromosomal abnormality by placing you in a 'high' or 'low' risk category. The results are presented as a "1 in …." risk.

The report will give two risks. The first is your background risk, which is based primarily on maternal age and the gestational age of your baby. Then, by incorporating information from the ultrasound and blood tests, the program will produce an adjusted risk, which may be higher or lower than your background risk.

Your adjusted risk will be classified as low risk if the risk is less than 1 in 300. For example; 1 in 2000. This means that if you were among 2000 other women with the same risk, statistically one of you would have a child with down syndrome. Keep in mind that even though a low risk result is reassuring, it does not guarantee that your child will not be affected by a chromosome abnormality.

Your adjusted risk will be classified as high risk if the risk is greater than 1 in 300. For example, 1 in 70. A high-risk result is not a definitive diagnosis. It means that you have an increased risk and further prenatal diagnostic testing, such as amniocentesis or chorionic villus sampling (CVS) may need to be considered.

What blood test do I need?
The first trimester biochemistry measures the levels of two hormones, PAPP-A and Beta-hCG. These hormones occur naturally in the mother's blood during pregnancy and their levels are known to change in the presence of certain chromosome abnormalities.

If you are sure of your dates, the most accurate time for this blood test to be performed at is 10 weeks gestation, although it can be performed up until 13 weeks 6 days. It is ideal for you to have your blood test performed in time for your nuchal translucency ultrasound. Your referring doctor will provide you with a referral and all major pathology laboratories will perform these tests for you.

When should you have the Nuchal Translucency Ultrasound scan?
The nuchal translucency screening test must take place at a particular time in your first trimester. This is between 11 weeks 2 days and 13 weeks 6 days or when your baby's crown-rump length (CRL) is between 45 and 84mm. If your dates fall outside of this range, the risk calculation cannot be performed.

For optimal results the best time to come for your nuchal translucency ultrasound scan is between 12 weeks + 4 days and 13 weeks + 4 days gestation.

If you are not able to come between these dates, please call our friendly Customer Service team to discuss the best option for you. We offer both Saturday and after hour's appointments at selected sites.

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CONT.

What preparation is required?
A comfortably full bladder is required for this scan. Please drink approximately 500ml of water an hour before your appointment time and try not to empty your bladder before the scan. A full bladder can help the Sonographer obtain better views of your baby as well as improve visualisation of your uterus, cervix and pelvic structures.

The majority of scans are performed though your lower abdomen, although occasionally, a transvaginal (internal) scan may be required to obtain a better view of your baby. The transvaginal examination is performed with an empty bladder and is not harmful to you or your baby. Your Sonographer will discuss with you in detail any questions or concerns you may have, if a transvaginal ultrasound is required.

How long will the Nuchal Translucency Ultrasound take?
Your nuchal translucency scan should take approximately 30 – 45 minutes. The amount of time required does also depend on the position and gestational age of your baby.

The Fetal Medicine Foundation have strict guidelines in place regarding nuchal translucency measurements. Occasionally, it is not possible to obtain an acceptable measurement or complete the anatomical assessment within the appointment time. In these instances, we may ask you to return later in the day to complete the scan. If this is required, your Sonographer will discuss this further with you.

What is the radiation dose?
There is no radiation dose associated with ultrasound. A nuchal translucency ultrasound scan does not have any known risks, side effects or complications and is considered very safe. There is no increased risk with having a longer scan or multiple scans.

How much will the Nuchal Translucency cost?
The cost of a nuchal translucency scan depends on whether you meet the Medicare criteria for a rebate. Please discuss your eligibility for a rebate with your referring doctor prior to your appointment with Qscan. Our Customer Service Team will be able to advise you of all costs involved with your nuchal translucency ultrasound, including any out of pocket cost (if relevant).

When can I get my results?
Images obtained from your scan are digitally recorded. At Qscan, a subspecialty trained Radiologist interprets the images obtained and provides a report for your doctor within 24 hours. Reports and images will be available electronically via the patient app and web portal after your examination. If required, films are available for collection or delivery to your referring practitioner. You will need an appointment with your doctor to discuss these results and your antenatal management.

Where can I go for a Nuchal Translucency Ultrasound?
Qscan Radiology Clinics have a range of convenient clinics located throughout South-East Queensland including: Annerley, Aspley, Burleigh Waters, Carindale, Everton Park, Mater Private Clinic, Mermaid Waters, Redcliffe, Robina Town Shopping Centre and Southport.

For further details please call one of our friendly Qscan staff on **1300 177 226** or visit us at: **qscan.com.au**