

Definitions

First trimester: First 12 weeks of pregnancy.

Second trimester: 13-27 weeks of pregnancy.

Third trimester: 28-40 weeks of pregnancy.

3D ultrasound: Scan to look at the 3D realistic image of the baby.

Real-time 4D imaging: Scan to look at the 3D realistic image of the baby while the baby is moving.

Amnioinfusion: Infusion of artificial amniotic fluid into the amniotic sac (space around the baby). It is used in certain conditions with extremely low amniotic fluid volume.

Cardiac arrhythmias: Irregular heart beats.

Fetal echocardiography: Detailed assessment of the baby's heart.

Fetal therapy: Intrauterine treatment of fetal conditions.

Invasive: Tests with the placement of needle into the mother's womb.

Karyotype: Chromosome analysis.

Multivessel fetal Dopplers: Measurement of the blood flow in various blood vessels of the baby to determine the well-being of the baby.

Non-invasive: Tests without the placement of needle into the mother's womb.

Nuchal translucency: Measurement of the thickness behind the baby's neck through ultrasound scan.

PAPP-A and beta-hCG: Chemicals measured through a blood test done on mothers in the first trimester. It is used together with nuchal translucency to assess the risk of the fetus having chromosomal abnormalities such as Down syndrome.

Percutaneous shunt placement: Insertion of a shunt or tube to connect one part of the baby to another part or to the amniotic sac.

Serial amniocentesis: Removal of liquor (water around the baby) on repeated occasions. It is done for pregnancy with excessive liquor.

Triple test: It measures three chemicals in the mother's blood. It is done in the second trimester to assess the risk of the fetus having chromosomal abnormalities such as Down syndrome.

Contact Us

Fetal Care Centre (FCC)
Kent Ridge Wing 2, Level 3

Fetal Care Centre Annex
Main Building 1, Level 1

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Website : www.nuhgynae.com.sg

Opening Hours : 8.30 am - 6.00 pm (Mondays – Thursdays)
8.30 am - 5.30 pm (Fridays)

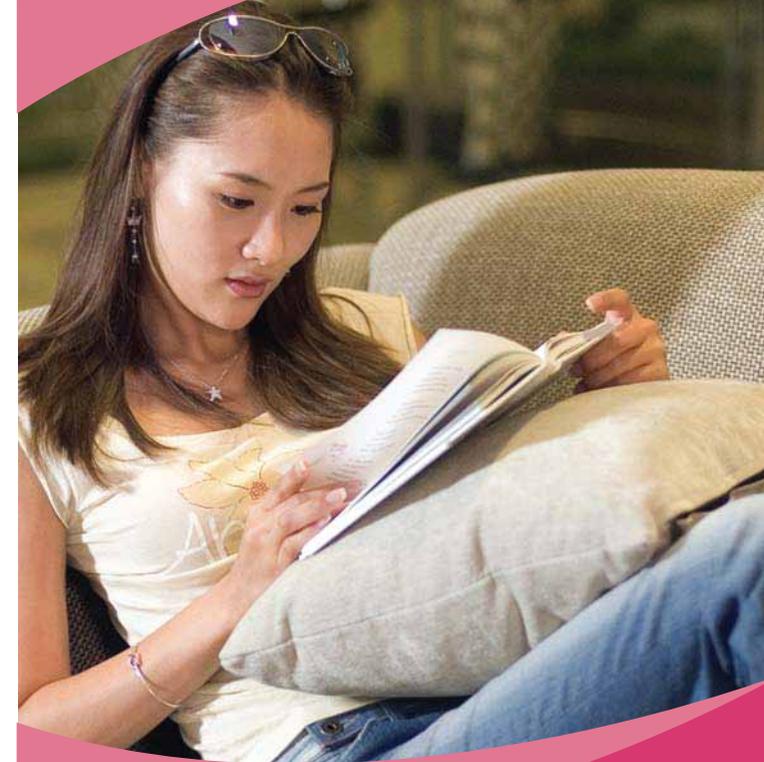
Location

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Information in this brochure is given as a guide and should not replace medical advice from your doctor. Please seek the advice of your doctor if you have any questions relating to the surgery, your health or medical condition.

Information is correct at time of print (Nov 2012) and subject to revision without notice.



NUH Women's Centre
Is My Answer

Fetal Care Centre
(Obstetrics & Gynaecology Ultrasound)

Fetal Care Centre



Our Fetal Care Centre (FCC) is the nerve centre of the Division of Maternal Fetal Medicine under the Department of Obstetrics & Gynaecology at NUH. It provides a comprehensive range of services for screening, diagnosis, counselling and management of fetal abnormalities during pregnancy. The centre is equipped with state-of-the-art diagnostic ultrasound machines, including machines with 3D/4D capability.

Ultrasound scanning is performed by a team of dedicated ultrasonographers, each with more than 12 years of experience in prenatal ultrasonography. Our Senior consultants take turn to supervise and provide expert advice whenever required. Our patients are referred to Fetal Care Centre by NUH clinics as well as specialists in Singapore and neighboring countries.

The centre aims to provide parents and obstetric caregivers the knowledge to make informed decisions about the pregnancy, using a comprehensive range of resources, from advanced imaging using 3D ultrasound, invasive and non-invasive testing of genetic diseases to life-saving fetal therapy. FCC is also an accredited centre for training in ultrasonography by the Royal College of Obstetricians & Gynaecologists (RCOG) and Royal College of Radiologists (RCR), UK.

The services offered can be broadly divided into 3 categories: Screening, Diagnostic and Treatment options.

Screening Services



1. First trimester non-invasive screening for Down syndrome – using nuchal translucency and serum biochemistry (PAPP-A and beta-hCG). (All the sonographers are certified by Fetal Medicine Foundation, UK for first-trimester nuchal screening and nasal bone screening). The result of the combined screening test, including blood test result, is made available within 2 hours.
2. Second trimester serum biochemistry (triple test) screening for Down syndrome



Diagnostic services



3D ultrasound, multivessel fetal Dopplers and fetal echocardiography are the major strengths of the centre in prenatal diagnosis. Our full range of services that can help in the detection of fetal abnormalities include:

- Targeted 2D ultrasound imaging (Fetal Abnormality Scans 20-22 weeks, Growth Scans - 24 weeks onwards, Biophysical Fetal Assessment).
- Doppler blood flow studies of fetal and uterine vessels.
- Fetal echocardiography with 3D/4D imaging of fetal heart.
- 3D reconstruction and real-time 4D imaging.
- Invasive testing including:
 - Chorionic Villus Sampling (CVS) at 11-13 weeks
 - Amniocentesis at 15-20 weeks – detailed chromosome analysis results available in 10-12 days.
 - Fetal blood sampling - cordocentesis.
- Diagnostic amniocentesis.

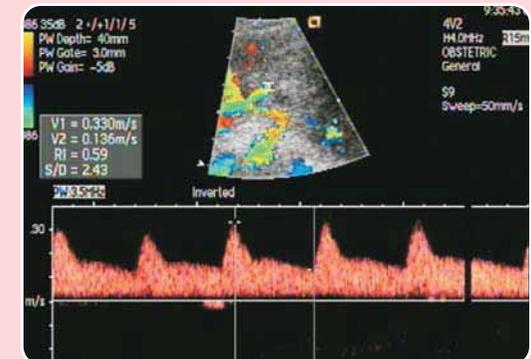
- Molecular biologic testing for single gene disorders e.g. thalassaemias, muscular dystrophies etc.
- Rapid karyotype with results available within one working day. The highlight of this service is that first trimester screening and diagnosis for Down syndrome can be performed on the same day as nuchal and serum biochemistry screen, followed by CVS for screen-positive cases. Presence or absence of Down syndrome can be confirmed within 24 hours.

Treatment Options



- Therapeutic amniocentesis
- Serial amniocentesis for Twin-transfusion syndrome
- Fetal blood transfusion
- Percutaneous shunt placement
- Treatment of fetal heart failure
- Fetal drug treatment for cardiac arrhythmias

In addition to antenatal screening and diagnostic services, the centre also provides a comprehensive range of gynaecological ultrasound services, including 2D and 3D endovaginal scans and colour Doppler scans.



Our Senior Consultants



A/ Prof A Biswas (Division Head, Maternal Fetal Medicine)

A/ Prof Wong Yee Chee (Section Head, Fetal Care Centre)

A/ Prof Mary Rauff

Dr Chua Tsei Meng

Dr Vanaja Kalaichelvan