

The No. 1 Choice for Mothers!

March 2017 | S\$5.00  
motherhood.com.sg

# motherhood Magazine

## STAY SAFE

- YOUR GUIDE TO EXERCISING DURING PREGNANCY
- WHAT YOU NEED TO KNOW ABOUT FIRST AID NOW
- WATER SAFETY TIPS TO KEEP YOUR KIDS PROTECTED

### "MUMMY, WHERE ARE YOU?"

WHAT TO DO BEFORE YOUR CHILD GETS LOST IN A CROWD



8 98149 108165  
MCI(P) 0580/07/2013 022084  
PPS:729/08/2013

# Your Ultrasound Scans

Congratulations! Now that you're pregnant, here's what you can expect when it comes to your ultrasound scans.

■ WORDS JOANNA ONG

Ultrasounds are one of the highlights of pregnancy – parents-to-be get a fuzzy sneak peek at what their baby looks like after weeks of wondering. It's like a glimpse into the dark and watery world where your baby lives for nine months. But for some, ultrasounds may not be a highlight but a worrisome event due to uncertainties of the pregnancy or the use of ultrasound itself. To allay any fears, Dr Christopher Ng, OBGYN at GynaeMD Women's & Rejuvenation Clinic at Camden Medical Centre remarks that in modern obstetrics, ultrasounds are a very useful non-invasive tool to determine foetal well-being throughout pregnancy without subjecting the pregnancy to harmful X-rays or radiation.

## Your First Peek

According to Dr Ann Tan, OBGYN at Women Fertility & Fetal Centre in Mount Elizabeth Medical Centre, the earliest ultrasound should be done around six to seven weeks from the last menstrual period to determine foetal viability. This scan also allows one to "date" the pregnancy and thus determine when the expected due date would be. This is highly important as the obstetrician is able to determine how well the pregnancy is doing and for early identification of twin pregnancies specially to differentiate between identical and non-identical twins. Dr Ng also adds that besides

determining gestation, this ultrasound scan is also used to confirm or exclude miscarriages and ectopic pregnancies.

## Testing for Abnormalities

Dr Tan highlights that the next few pregnancy scans should be done specifically at 11 to 14 weeks to determine Nuchal thickness (neck thickness) and an early foetal anomaly scan can be done at the same time. This scan is also a part of the trisomy screening test commonly called "the first-trimester screening test" or "Oscar Test" which is a non-invasive screening test to determine the risk of certain genetic disorders (Down syndrome being the most common).

**The next significant scan should be done at 20 to 22 weeks as it is the best time to do a foetal anomaly scan and determine the gender of the baby.**

A foetal echo can also be done should the need arise. Placental location and cervical length should also be assessed at this time as this gives clues to the risk of preterm labour. Thereafter serial scans can be done on a regular interval usually monthly.

It is important to note that even though ultrasound scans may

indicate various chromosomal abnormalities which some are referred to as "soft markers", they are not used to diagnose chromosomal abnormalities, cautions Dr Arundhati Gosavi, associate consultant in NUH Women's Centre. Invasive tests like amniocentesis and chorionic villus sampling, where the cells from the foetus are tested for cytogenetic studies, are used to confirm chromosomal abnormalities. It is important to understand that chromosomal abnormalities like Down syndrome sometimes may not show any gross abnormalities on scans.

## Third Trimester Scans

During the third trimester, scans are generally done to check for your baby's weight and growth velocity, the amount of amniotic fluid and placental blood flows that are indicated in certain fetuses, Dr Arundhati mentions. For women who are wondering how important these scans are, Dr Arundhati gives a few other reasons:

 Mid-trimester scans help to ensure that your baby's organs are normal.

 Scans can pick up on growth issues like intrauterine growth retardation and identifies babies who need frequent monitoring and early delivery.

 Assessing the amount of amniotic fluid in the uterus and blood flow to the baby's organs can help plan the timing of delivery in certain foetuses.

### How is an Ultrasound Scan Conducted?

Dr Arundhati explains that an ultrasound scan sends sound waves through your womb (uterus). These waves bounce off your baby as echoes. These returning echoes are then turned into an image on a screen that shows your baby.

**Depending on clinics, a sonographer or your OBGYN will perform the ultrasound scan which usually takes between 10 to 20 minutes for a dating scan, 20 to 30 minutes for a 12-week scan and the 22 weeks' scan can take around 45 to 60 minutes depending on your baby's position. The best part is you'll have a print-out image of your baby at the end of the scan.**

Dr Ng shares that during the six-week dating scan, the vagina route is preferred as the foetus tends to be small so an abdominal ultrasound scan may not be able to visualise the pregnancy properly. In this case, in addition to lying down on the examination couch, women will need to remove their underwear in order for the vaginal probe to be inserted into the vagina. After six weeks of gestation, an abdominal ultrasound



scan should be fine. A layer of lubricating ultrasound gel is applied and spread over the abdominal area to allow the ultrasound probe to glide smoothly over the abdomen and to help transmit the sound waves from the ultrasound probe thereby improving image quality.

For those of you who are wondering how accurate these scans are, Dr Tan summarises that it usually depends on the gestational age of the baby, the presence of abdominal scars, scan quality and the sonographer. Dr Arundhati adds that a scan only looks at the structure of most organs and may not predict their functioning. Not all abnormalities of a baby can be detected by the ultrasound scans performed during pregnancy. Few conditions like heart abnormalities, cleft palate, diaphragmatic hernia and others may be missed. Additional tests or imaging like MRI may be required if any structural abnormality is detected to confirm the diagnosis and find out the cause.

### Let's Hear that Heartbeat

Some mothers who are more concerned about the development of the baby may have purchased home dopplers to hear their baby's heartbeat for some assurance. Are they safe for usage? Dr Ng and Dr Tan both agree that home dopplers are safe as all ultrasound machines are set with safety limits and home dopplers are most likely set at even lower levels. However, Dr Arundhati cautions the use of home dopplers as it has not been proven to improve or ensure the foetal well-being and it may cause unnecessary worry if the instrument malfunctions and the heartbeat is not detected.

All in all, numerous large studies done over the last 35 years have found no evidence that ultrasound scans harm developing babies, or that there's a cumulative effect from having multiple scans. So, relax, enjoy your scans and bring your hubby along to get a good view of your precious baby! ■