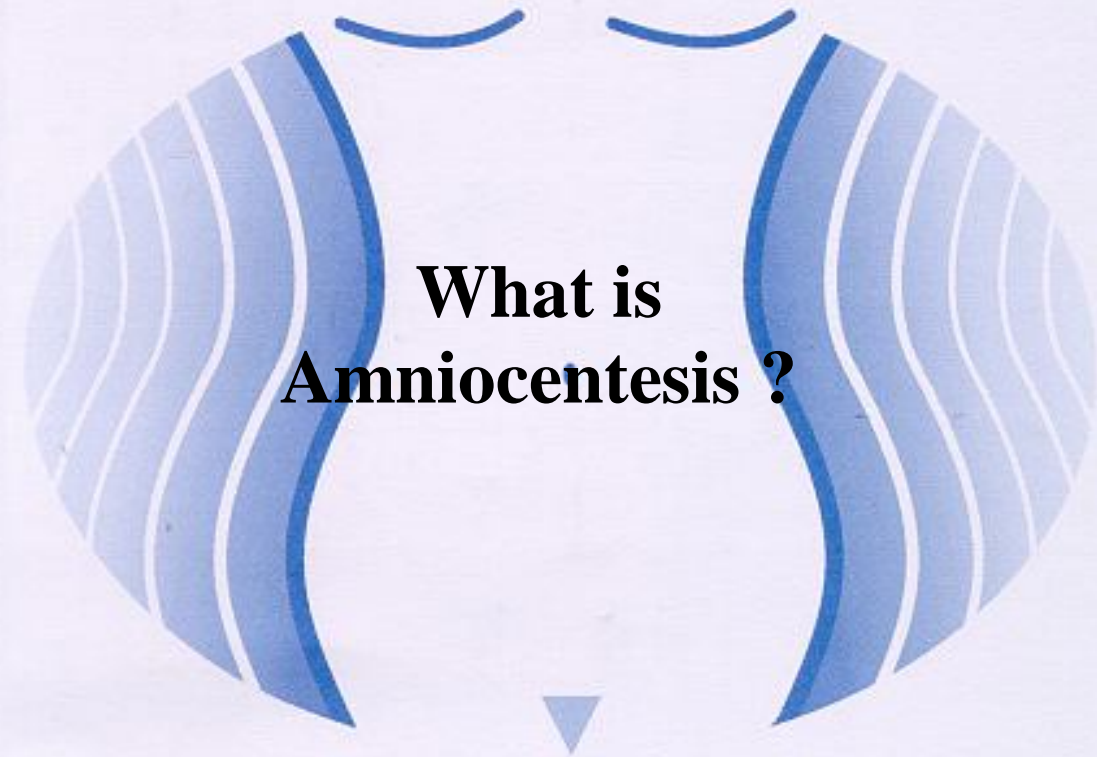


Obstetric and Gynaecological Ultrasound in Mulgrave (formerly Diagnostic Women's Ultrasound), has provided specialist pregnancy and gynaecological ultrasound services to Melbourne's South East and the Dandenong region since 1989.

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.



Dr Simon Meagher
Obstetrician Gynaecologist Ultrasonologist
BSc MB BCH BAO MRCOG FRCPI FRACOG DDU COGU
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What is Amniocentesis ?

Amniocentesis is a test performed during pregnancy to determine the genetic make up of the developing fetus. It is a minor procedure, which involves passing a fine needle through the maternal abdomen and front wall of the uterus into the fluid around the fetus (amniotic fluid). A sample of the fluid is obtained and sent to the laboratory where the fetal cells are harvested, cultured and treated to reveal their chromosomes. While the amniocentesis can be performed at any stage in pregnancy, it is usually best performed between 15-16 weeks. The volume of fluid aspirated is about 1/6th of that present around the fetus and this is naturally replaced over the next 24 hours.

Who may be offered Amniocentesis ?

Amniocentesis is generally offered to patients who:

- a) are 37yrs or over at the estimated date of delivery
- b) have previously had a child with a chromosomal abnormality
- c) themselves have a chromosomal abnormality or other rare 'metabolic' or genetic abnormalities
- d) have been assessed as having an increased risk of having a baby with a chromosomal abnormality from their 12 week nuchal translucency ultrasound
- e) anyone anxious regarding the possibility of a chromosomal abnormality in their baby.

How is it performed ?

An ultrasound examination is first performed to confirm the dates, assess the position of the placenta (afterbirth) and carefully examine the baby for signs of chromosomal abnormality such as Downs Syndrome. The operator using ultrasound selects a point on the abdominal wall. It is then cleaned with antiseptic and the thin amniocentesis needle is then guided into the amniotic fluid sac around the baby, while tracking its course on the ultrasound screen. The needle is held well away from the baby. It takes about 30 seconds to draw up the straw coloured fluid. This sample is sent to the laboratory where the baby's cells within the fluid are cultured and examined for their genetic make up.

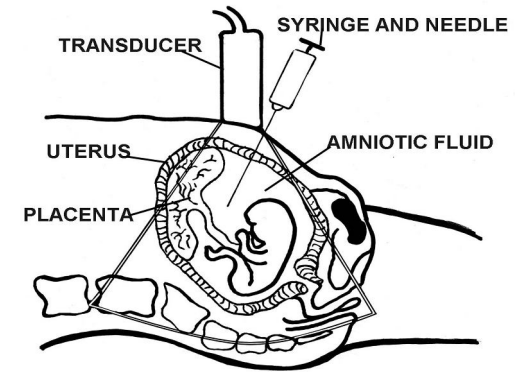
What are the risks of the test ?

The principal hazard of the procedure is the risk of introducing infection into the pregnancy sac, which may result in miscarriage. This complication occurs in only 1/200 tests performed. The warning signs of miscarriage include regular crampy period-like pains with fresh vaginal bleeding usually in the first 24-48 hours after the test. A small fluid leak is a rare problem with much less likelihood of progressing to pregnancy loss, this usually settles of its own accord

What happens to the specimen taken ?

A 15-22 ml sample of fluid is aspirated and sent to the laboratory. The baby's cells are extracted from the fluid and placed in a culture medium in a warm incubator. In 7-10 days when sufficient cells have grown, they are treated so the chromosomes are revealed. The chromosomes are examined under the microscope with ultraviolet light. Each individual chromosome pair (of which there are 23) is examined in detail. The laboratory scientist will examine the cells for an extra chromosome no. 21 (Down Syndrome) and for any abnormality in the other 22 pairs of chromosomes.

Diagrammatic representation of an amniocentesis.



The patients head is to the left and the legs to the right. The needle is advanced into the largest pocket of fluid and 15-22 ml aspirated. It takes 5-10 minutes to set up the procedure and 1-2 minutes to aspirate the fluid.

What is to be expected after the test ?

Most patients will experience a few crampy pains or some mild abdominal discomfort after the test. This is due to irritation of the uterus by the amniocentesis needle or local anaesthetic. It is safe to take 2 paracetamol tablets for the pain, if needed, but no stronger analgesic should be necessary. If the pains worsen then contact your doctor. Some spotting after the test is also not unusual, but should this progress to fresh red bleeding then contact your doctor. Many patients may experience no symptoms at all after the test.

How long before I know the results ?

The definitive, "long term culture" results are usually available in 10 to 21 days from the time of the amniocentesis. You will be contacted by us by phone with the result and a written report will also be mailed directly from the laboratory to your doctor. If you want to know the sex of your baby, your treating doctor will have this information. In some cases an extra analysis called "FISH" (fluorescent in-situ hybridization) is also requested. This result may be available as early as 48hrs after the amniocentesis, but is less accurate than the long term result.

Are the results accurate ?

This chromosomal testing is one of the most reliable medical tests which has an accuracy in order of 99.9%.

What do I do following the procedure ?

It is recommended that you have someone with you to drive you home. You should take it easy for approximately 24-48 hrs after the procedure as you may experience some mild crampy abdominal pains. During this time, it is important to avoid any heavy lifting, including carrying your children. 24-48 hrs after the test you may resume your usual activities. If you experience any unusual symptoms such as increasing pains or bright bleeding, please contact your doctor.