

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 specialise 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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Chorionic Villus Sampling (CVS)

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What is CVS?

Chorionic Villus sampling is a test which involves obtaining a small sample of tissue, the chorionic villi from the developing placenta. The placenta, which has the same chromosome makeup as the baby, may then be examined for genetic, DNA or biochemical abnormalities eg. Down Syndrome, Cystic Fibrosis etc.

Who is offered CVS?

CVS is generally offered to patients who are at particular risk of Down syndrome and other chromosomal abnormalities. This includes patients who have an increased nuchal translucency (NT) noted at the 12-14 week ultrasound (see. NT information leaflet), mothers who will be 37 years or older at the time of delivery, and mothers who have had a previous Down syndrome baby.

The test is however available to anyone who wishes to have it.

How is the test performed?

The skin of the lower abdominal wall is cleansed with an antiseptic solution. The skin and underlying tissues are injected with local anaesthetic. The discomfort felt during the injection of the local anaesthetic is similar to that felt when blood is drawn from the forearm. With ultrasound guidance a fine needle is then directed into the placenta and a biopsy of placental tissue is taken (chorionic villi). Sometimes a dragging sensation is felt in the pelvis or in the legs during the procedure. This is quite commonly experienced with this test. Also, sometimes more than one biopsy is required to obtain enough tissue for the test.

When is the test performed?

Ideally the test is performed between 12-13 weeks gestation.

What preparation do I need before a CVS?

A moderately full bladder is helpful. A scan is performed before the biopsy in all patients to 1) make sure the baby is alive and well, 2) to determine the number of fetuses and 3) to check for abnormalities in the baby including an increased nuchal translucency (see NT information leaflet). A variety of abnormalities may be detected at this early stage of pregnancy. Finally it is important to know what your blood group is before the test, (ie Rh positive or negative). If possible ask your doctor to provide this information or bring along your blood group card at the time of the CVS. If your blood group is Rh negative you may require an injection after the test (refer Anti-D information leaflet).

What happens after the biopsy has been taken?

The specimen is sent to the laboratory and processed. The tissue is placed in a culture medium and then into an incubator for several days. When there are a sufficient number of dividing cells, the specimen is removed from the incubator and the placental cells are split open with an enzyme. The individual chromosomes are counted and carefully analysed for major and more subtle genetic abnormalities.

What should I do after the test?

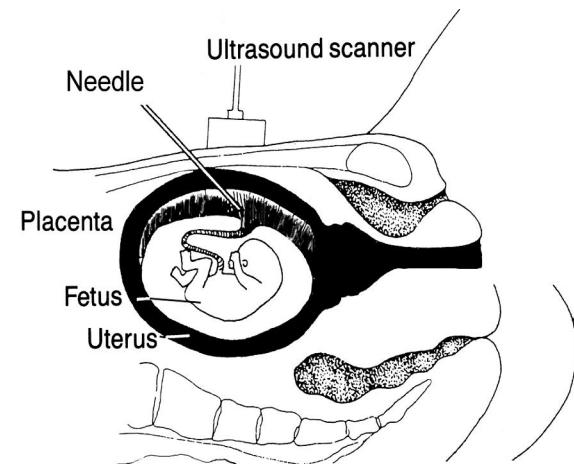
It is recommended that you rest for the remainder of the day. This does not mean you should confine yourself to bed but rather you should just rest at home and avoid strenuous activity such as heavy lifting. Most patients experience short lived mild crampy period-like pains or leg pains after the test. This is most likely to occur after the local anaesthetic wears off, ie within the first half hour after the test. Some patients experience slight vaginal spotting after the test which is also not unusual.

What are the risks of a CVS?

There is a 1% risk of miscarriage. This is usually related to the small risk of infection introduced at the time of the procedure. You will note precautions are taken to minimise this risk. Warning signs of miscarriage include strong regular period like pains with fresh red bleeding. Call your doctor should this occur. The time when miscarriage is most likely to occur is the first 24-48 hrs to one week after the test.

Additional complications of the test include 1) failure of the specimen to grow sufficiently in the laboratory and 2) uncertain laboratory results. These complications are very uncommon and if they do occur you still have the choice of an amniocentesis test at 15-16 weeks. This test will give the same information about the baby's chromosomes (refer amniocentesis information leaflet). The needle itself is directed well away from the baby. In fact when the biopsy is taken the needle is positioned outside the pregnancy sac so direct trauma from the needle is not a concern (see diagram below).

DIAGRAMMATIC REPRESENTATION OF A CVS



The mothers head is to the left and the legs to the right. The needle is directed under ultrasound control into the developing placenta. One or sometimes two biopsies are taken.