Chorionic Villi Sampling

At Canberra Specialist Ultrasound we are passionate about delivering the very best ultrasound imaging service for the benefit of all our patients. We bring together a nationally and internationally renowned team of highly experienced doctors and medical imaging professionals from across the country into a caring and dedicated environment.

Introduction

This is a test which may be offered to a woman who has a higher than normal risk of having a baby with a specific abnormality. You and your doctor will decide whether it is appropriate for you to have this test.

Who may be offered CVS?

1. Women with an abnormal nuchal translucency test or maternal blood triple test.

2. Parents who are known to have a chromosomal abnormality themselves or who have a family history of a genetic disorder.

Preparation

It is not necessary for the mother's bladder to be full. However, **having some urine in the bladder makes it easier to see the baby and the lower part of the uterus.**

How is the test performed?

The chorion is the early placenta. Chorionic villi are small finger like projections that make up part of the chorion. Cells of the chorionic villi almost always have the same chromosomes as the fetus. Therefore, abnormalities in the chromosomes of the fetus are also found in the chromosomes of the chorionic villi.

The mother will have an ultrasound examination, which will confirm the dates of her pregnancy and show the baby as well as the position of the developing placenta. Using a slender needle, under ultrasound guidance, the doctor will pass a fine needle into the placental tissue to take a small sample. It takes only about sixty seconds to obtain the tissue specimen needed. The doctor will spread the sample on a special dish to check there is sufficient specimen present before finishing the procedure. After the needle is removed and the baby checked again, the mother may leave the room immediately to empty her bladder and dress.

Any discomfort felt is usually minor. Almost without exception, women experience far less discomfort from the test than they had expected.

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A test is then carried out on the cells in the chorionic villi. Using special procedures the chromosomes in these cells can be examined for any chromosomal abnormality.

Fast FISH (Flourescent In-Situ Hybridisation) results, which analyse the 5 main chromosomes most commonly associated with aneuploidy, will give a preliminary result within 2 days.

The doctor who is looking after you and your pregnancy will tell you the results of your CVS. In most cases they will be able to tell you the sex of the baby if you want to know.

Rarely the chorionic cells display a condition known as mosaicism. This occurs when the fetus has two cell lines, one of which may be normal and one of which may be abnormal. In this situation an amniocentesis may be carried out after 15 weeks gestation.

Precautions

Although most women are quite capable of driving themselves home after the test, it is suggested that, where possible, a companion should drive. It is normally recommended that the patient should take things quietly for the rest of the day. After this time, she may return to her normal routine.

It is most uncommon to have any problems at all after the test. Occasionally there may be some mild discomfort due to a little bruising under the skin. If there is any loss of fluid or blood from the vagina or any other pains after the amniocentesis your doctor should be consulted.

What complications can occur?

The risk of the test causing a miscarriage is low, not more than 1 in 200.

In about 0.5% of patients, there is some bleeding in the 24-48 hours after the procedure.

In almost all cases this stops on its own and does not cause any problems to the baby or to the pregnancy.

The CVS test does not appear to be associated with any other complications to the baby or to the pregnancy. The test, like any other, may fail to give a result, either because no specimen is obtained or because the laboratory cannot produce a result. Both of these events are uncommon. If this occurs your doctors may arrange an amniocentesis after 15-16 weeks gestation.

What about the results?

The fast FISH is available in around 2 days.

This gives a result on the 5 main chromosomes most commonly associated with abnormality.

The full chromosome testing takes around two to three weeks because of the requirement to grow the cells. The laboratory will send the results directly to your doctor who will arrange for you to receive the results.