Coombe Women & Infants University Hospital
Excellence in the Care of Women and Babies
Foirfeacht i gCúram Ban agus Naíonán

CHORIONIC VILLUS SAMPLING

INFORMATION GUIDE FOR PATIENTS

Chorionic villus sampling (CVS) is a test usually carried out to examine your baby's chromosomes. Most commonly, it searches for Down Syndrome but can also be used to detect various genetic syndromes. The decision to have CVS is always voluntary and parents can decide if they would like to have this test. The information below may help you decide whether or not to have this test.

What is a CVS?
CVS involves removing some cells from the developing placenta, which is also known as the afterbirth. This differs from amniocentesis, where instead the fluid from around your baby - amniotic fluid - is examined. Both the baby and the placenta come from the same cell so the chromosome present in the cells of the placenta are usually the same as the baby. Chromosomes are tiny microscopic packages present in every cell in the body.

Normally in each human cell there are 46 chromosomes. These are divided into pairs so that we have 22 pairs and two single chromosomes, which dictate what sex we are. A missing, or an extra chromosome, causes many changes in the way an unborn baby develops. An extra no 21 chromosome causes Down Syndrome and amniocentesis is able to detect this.

How is CVS performed?
CVS is usually performed between 11-13 weeks. An ultrasound scan will be done to check the position of your baby and the placenta. A CVS may be carried out through your tummy, or usually through your vagina in a similar manner to performing a cervical smear. There is no best approach and the method used will often depend on where the placenta is located and most accessible in your individual case.

If the abdominal route is the preferred method, your tummy will be cleaned with antiseptic fluid and local anaesthetic will be given. A needle will be passed through the wall of your womb into the early developing placenta. At all times the needle is carefully watched with the ultrasound scan to ensure that it is in the correct position. A small amount of placenta will be withdrawn through the needle.

The transvaginal method involves placing a plastic or metal speculum - like when you have a smear test - into the vagina to see the cervix clearly, which is the neck of the womb.

A very fine specially designed catheter is passed through the cervix and is directed towards the developing placenta and a small amount of placenta is aspirated, or taken, using a syringe. Again, this is always performed using ultrasound guidance.

If your blood group is Rhesus negative, you will require an injection of Anti-D after the test to prevent blood incompatibility between you and your baby, as a result of the CVS test.

What should I expect after CVS?
For the first few days you may experience some tummy discomfort, period - like pain, or a little bleeding. These are relatively common and in the vast majority of cases the pregnancy continues without a problem. You may find it helpful to take some simple pain relief like Paracetamol, which is safe in pregnancy, and rest for a few hours. If you have a lot of pain, or bleeding, please seek medical advice.

When can I expect the results?
Results of the test are usually available in 2 to 3 weeks. This is because the cells have to grow before they can be examined. After the CVS, we will make an arrangement to contact you with the results as soon as we obtain them from the National Genetics Centre in Our Lady's Children's Hospital, Crumlin. Most people are happy to receive the result over the 'phone but if you wish to have the result in person, this can be organised.

The full result will also tell you whether you are expecting a girl or a boy, so you may want to give some thought whilst you are waiting for the result if you would prefer not to know the sex of your baby. If you have not heard from us after 3 weeks, please contact us.

What are the risks associated with this test?
The risk of miscarriage from the test is approximately 1 to 2%, whilst the risk with amniocentesis is about 0.5%. If you were to miscarry due to the test, this would happen usually within 5-7 days of the test. Some studies have shown that when CVS is done before 10 weeks, there is a small risk of limb defects in the baby. To avoid this risk, CVS is performed after 10 weeks.

Rarely – less than 1% - is a result not obtainable from the test, if the villi do not grow in the laboratory. In this instance, the test may need to be repeated. Occasionally, 1-2%, the result may be difficult to interpret and you may require further investigation to clarify the diagnosis.

For Down Syndrome, the result will clearly state whether your baby is affected or not, with a high degree of accuracy. A result that says your baby does not have Down Syndrome doe not guarantee that the baby is entirely normal.

If you have any comments on this leaflet, please let us know by emailing info@coombe.ie.

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