Chorionic Villus Sampling Test (CVS)

Information for Patients and Families
The Chorionic Villus Sampling Test (CVS)

The following gives you information about the CVS test. It tells you what a CVS test is, when and how it is done, what happens after the test, and possible benefits and risks of taking the test. This leaflet is designed to be used alongside the discussions you have with your health care professionals and help you to ask the questions that are important to you.

What is a CVS test?

The chorionic villi are part of the developing placenta (afterbirth). A CVS test involves taking a tiny sample of the chorionic villi to perform a genetic test during pregnancy. It is most commonly used to check the baby’s genes or chromosomes for specific genetic conditions. It may be offered to you for a number of reasons.

- You are an older mother (35 years or older) and therefore have an increased risk of having a child with a genetic condition such as Down syndrome.
- You or your partner has a genetic condition which may be passed on to the baby.
- There is a genetic condition in your or your partner’s family, and there is a risk that the condition may be passed on to the baby.
- You have had a previous child affected by a genetic condition.
- You have had another type of test that is done during pregnancy (such as an ultrasound, nuchal translucency scan or blood test). It has shown that there is an increased risk that your baby has a genetic condition.

When is the CVS done?

CVS is usually done between 10 and 13 weeks of pregnancy.
How is the CVS test done?

CVS involves taking a tiny sample of tissue from the developing placenta, which has the same genes as the baby. First, an ultrasound is done to check the position of the baby and the placenta. Next, the tissue is taken. There are two possible ways to take the tissue. The doctor or nurse will decide which is most appropriate depending on the position of the placenta and the baby. Most are done through the abdomen.

1. Through the abdomen
   The tissue is taken by inserting a fine needle through the skin and the abdomen, through the wall of the womb and into the placenta. The ultrasound is used to help the doctor or healthcare specialist guide the needle into the right place. Some tissue is sucked up through the needle and sent to the laboratory for testing.
2. Through the cervix (entrance to the womb)
A pair of fine forceps are passed through the cervix. This feels similar to having a smear test. The ultrasound is used to help the doctor or healthcare specialist guide the forceps to the right place. Some tissue from the placenta is then taken using either forceps or a fine suction catheter, and sent to the laboratory for testing.

Is the CVS test painful?

Although you will be aware of what is happening, most women describe it as being uncomfortable rather than painful, and similar to period pains. Women who have the test done through the abdomen say they are aware of a pushing feeling and some soreness around the area afterwards. Women who have the test done through the cervix say that it feels like having a smear test done.
What will happen after the CVS test?

The test should take about 15-20 minutes. It is a good idea to bring a companion with you for support both during and after the test. You should take things easy for a couple of days after the test. Avoid any heavy lifting or strenuous exercise.

Some women who have a CVS test have some spotting (spots of blood) and some period-like cramping afterwards; this is normal. If you have heavier bleeding, you should let your doctor know. You should not have sexual intercourse until after any bleeding has stopped.

What are the risks of the CVS test?

About 1-2 women in 100 will have a miscarriage as a result of having CVS (1% to 2%). We do not really know why this happens. However 98 - 99 out of 100 pregnancies (98% - 99%) should continue normally.

Is the CVS test reliable?

You should discuss with the doctor the accuracy of the particular genetic test that you are considering, as this depends on the actual gene or chromosome change for which the test is being done.

Very occasionally the test may not be successful and another test may need to be done.

Can all genetic problems be detected with the CVS test?

Test results usually only provide information about the condition that was tested for. Occasionally the test may uncover results relating to other conditions. There is no general test for all genetic conditions.
How long will it take to get the test results?

The time it takes to receive the results depends on which condition is being tested for. For some conditions it will only take 3 days to get the test results. For others it will take 2-3 weeks. If the result takes longer than this it does not necessarily mean that the result is bad, it may mean that the cells are taking a longer time to grow.

If you are having a CVS test for a rare genetic condition, ask the doctor how long it will take to get the results back.

When the test results are ready you may be called back to speak to the doctor or health professional, or you may be given the results another way, such as by telephone. You should discuss this with the doctor at the time of the test.

What if the result shows the baby has a genetic condition?

If the result shows the baby has a genetic condition, the doctor will discuss what this means and how this could affect your baby. They will discuss with you if there is a cure or treatment available. They will talk about your options and sometimes the possibility of ending the pregnancy. They will help you consider what is best for you and the baby. Very occasionally the test will uncover an unusual chromosome arrangement where the impact on the baby will be unclear.

HIV infection

If you are HIV positive, there is a small risk that the CVS test might cause the HIV virus to be passed on to your baby. It is important therefore that if you are HIV positive you discuss this with your midwife or doctor as measures need to be taken to minimise the risk of transmission to your baby during the CVS.
Making a decision about having a CVS test during pregnancy can be difficult. It is important to remember that you do not have to take a CVS test if you do not want to. You should only have a CVS if you and your partner feel that it is important for you to have the information which the test can provide, and do not feel the risks are too great for you to take. To help you make the decision which is best for you, you should discuss the following information with the doctor:

- Information about the condition being tested for.
- The risk that the baby has the genetic condition you are thinking of testing for.
- Information about the test and what the results will tell you.
- The reliability of the test.
- The risk of having an uncertain result and having to take the test again.
- The risk of miscarriage from CVS (both through the abdomen and through the womb).
- How long it will take to get the test results.
- How you will get the results.
- Your options if the baby is found to have a genetic condition.
- How the experience may affect you and your partner emotionally.

These are some of the issues you should think about before making a decision about the CVS test. You can also look at the ‘Frequently Asked Questions’ leaflet, which lists a number of questions you can ask the health professional about genetic testing. It has been developed by people who have been through a similar experience to your own. Bring any questions or concerns with you to your appointment – write them down. If you need an interpreter, let the department know.
This is only a brief guide to the CVS test. More information can be obtained from your local regional genetics centre (www.geneticalliance.org.uk/services.htm) or from these addresses:

**Antenatal Results and Choices (ARC)**
73 Charlotte St.,
London,
W1T 4PN
Tel: 020 7631 0285
Providing support and information for women during the antenatal testing process.
info@arc-uk.org
www.arc-uk.org

**Genetic Alliance UK**
Unit 4D, Leroy House,
436 Essex Rd.,
London, N1 3QP
Telephone: 0207704 3141
Provides information about specific genetic conditions and contact details of support organisations.
mail@geneticalliance.org.uk
www.geneticalliance.org.uk

**Orphanet**
Free-access website providing information on rare diseases and orphan drugs, and links to support groups across Europe.
www.orpha.net

**EuroGentest**
Free-access website providing information about genetic testing and links to support groups across Europe.
www.eurogentest.org

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