



CVS

This brochure explains a test called Chorionic villus sampling (CVS) that is available in pregnancy. It is one of a number of tests that can be used to detect birth defects in pregnancy.

What is chorionic villus sampling?

Chorionic villus sampling (CVS) is a procedure that allows a small sample of the baby's developing placenta ('after-birth') to be collected. The baby and the placenta both develop from the fertilised egg. Cells from the placenta are therefore similar to the baby's cells and can be tested for some types of birth defects. The developing placenta is made up of tissue called chorionic villi at this stage of pregnancy. The most common type of test done on a CVS sample is a chromosome test. In some cases, tests for specific genetic conditions may be done.

Why should I consider chorionic villus sampling in my pregnancy?

CVS may be offered when there is an increased risk that the baby may have a chromosome problem or other type of birth defect. Some of the most common reasons include:

- If the woman will be older than 35 at the time of delivery of the baby.
- If an increased risk of a chromosome problem is identified on a screening test, such as nuchal translucency screening.
- If an ultrasound detects unexpected abnormalities in the baby.
- If the parents have had a previous baby with a chromosome problem, or a parent has a variation of the chromosomes that increases the chance of the baby having a chromosome problem.
- If there is an increased risk that the baby may have a particular genetic disorder, for which a test is available.

It is up to you and your partner whether you choose to have a CVS. You can discuss this with your doctor or midwife.

There are many things to consider before choosing whether or not to have a test in pregnancy. The introductory brochure 'Testing for birth defects in pregnancy' will help you to consider these issues and understand some of the terms used. Always discuss any questions or concerns you have with your doctor.



When is chorionic villus sampling done?

CVS is usually done around 10-11 weeks of pregnancy. It can be done later if there is a specific reason.

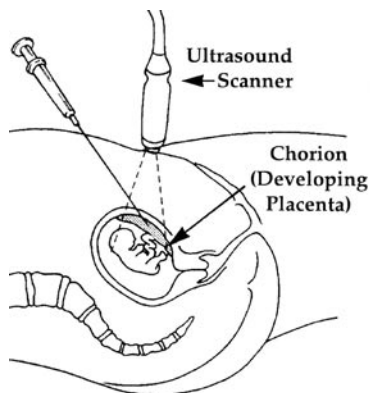
How is chorionic villus sampling done?

CVS is an outpatient procedure performed by a specially trained doctor. If you decide to have a CVS, an ultrasound scan will be arranged before the test to establish the stage of pregnancy, the best time for doing the CVS and the best technique to use.

For a CVS to be done, it helps to have a full bladder. The uterus (womb) is often hidden behind the bowel making it difficult to see. When the bladder is full, the bowel is pushed out of the way. Starting an hour before the scan you will need to drink 500ml of clear fluid (not milky or fizzy), finishing half an hour before the scan. The CVS takes about 30 minutes in all. Most of the time is spent having an ultrasound scan and preparing equipment. The collection of the sample usually takes about a minute.

Your partner or support person is encouraged to attend. It is best that children do not attend. Creche facilities are available free of charge at the hospital, ring 8161 6394 to book.

The procedure



Ultrasound is used to see where the baby and the developing placenta are located. The woman's abdomen is cleaned with antiseptic. Local anaesthetic is injected into the skin to numb it. A fine sterile needle is guided through the woman's abdominal wall and the wall of the uterus (womb) into the developing placenta. The path of the needle is watched by ultrasound. A smaller needle is then guided through the initial needle to collect a small sample of the developing placenta.

This smaller needle may need to be passed several times in order to collect enough cells for testing. This method is called “transabdominal” CVS and is almost always used. The sample of the developing placenta is sent to the laboratory for testing.

Occasionally a different method called “transvaginal” CVS is used. The doctor would discuss this with you if it was necessary to use this method.

Sometimes due to the position of the placenta, it may not be possible to collect a sample. If this happens, you may be asked to come back a week later to try again. If this is not successful, then a different test called an amniocentesis may be needed (see brochure on amniocentesis).

Most women say that the procedure is no more painful than other types of injections. Some women feel cramping when the needle enters the uterus or as the sample is being collected.

What are the risks of having a CVS for the woman and baby?

Some women experience cramping on the day of the test. Occasionally some vaginal bleeding will occur. This usually settles within 24 hours, however contact your doctor if you are concerned.

It is estimated that about 1 woman in every 100 to 200 women will miscarry as a result of having a CVS. In other words 0.5% to 1% of all the women who have this test will suffer a miscarriage.

What happens after the CVS is done?

Arrangements will be made for you to receive the results. You are advised to rest at home for the remainder of the day. Your blood group needs to be known and, if it is Rh negative, you will usually receive an injection of anti D at the end of the procedure. Your doctor will explain why this is necessary.

The results from your CVS

The most common test done on a CVS sample is a chromosome test. In order to analyse the chromosomes fully, the cells from the placenta must first be grown. The final chromosome result is usually available within 5 to 10 days. If a CVS is done to test for a specific genetic disorder, results may take longer. Your doctor will discuss this with you further. The CVS will identify the sex of the baby. Parents may choose whether or not they wish to be told.

In a small number of cases, in order to be able to interpret the results of the chromosome test fully, a chromosome test on a blood sample from the parents or further tests on the baby may also be needed. In about 2 in 100 tests (2%) the results may be difficult to fully interpret and an amniocentesis may be needed to clarify the results. (see brochure on amniocentesis)
In up to 2 tests in 100 (2%) a result cannot be obtained from the sample, because not enough cells are present. A repeat test is then needed.

Does a normal CVS result mean that my baby will be born healthy?

CVS is an accurate way of testing for most chromosome problems. However, mosaicism and very small chromosome problems cannot be excluded. (see introductory brochure on 'testing for birth defects in pregnancy)

A CVS cannot detect all problems with a baby. Having a normal result on a CVS does not guarantee that your baby will not have a birth defect as most are not caused by abnormalities of the chromosomes.

What if the test shows that my baby has a problem?

If the test shows that your baby has a problem, a medical specialist will talk to you about what this is likely to mean for the baby and what treatments or options are available to you.

Are there any other tests that can tell whether my baby has a chromosome problem?

Amniocentesis is another test that allows a baby's chromosomes to be tested accurately. This test can be done after 15 weeks of pregnancy. Please read the brochure on amniocentesis for further information about the differences between these tests. It is usual to choose either a CVS or an amniocentesis, not both.

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