

# Chorionic Villus Sampling (CVS)

## What is chorionic villus sampling (CVS)?

The fetus (developing baby) and the placenta develop from the same fertilised egg cell, meaning the placenta has the same genetic make-up as the fetus. This means that we can use a small piece of tissue from the placenta (a chorionic villus sample) to check the genes or chromosomes of the fetus. This test is very accurate and can be performed from around 11 weeks of pregnancy. This test is also known as a chorionic villus biopsy (CVB).

## What are the risks associated with CVS?

There is a small risk of miscarriage associated with CVS, which is usually 1% over the background risk for that stage of pregnancy (about 2-3%). This risk of miscarriage can be clarified by the doctor who is performing the procedure. Unfortunately, if a woman miscarries there is no way of knowing whether this was due to the CVS or whether it would have happened anyway.

## What do I do before the CVS?

You will need to have a dating scan when you are at least 8 weeks pregnant, which will allow us to calculate when the procedure can be done. You will also need to have had your blood group tested to see if you are Rhesus positive or negative. If you are Rhesus negative you will need an injection after the procedure to prevent complications related to this. **You should come with a full bladder prior to the procedure.**

It is important that you let your midwife or doctor know in advance if you are HIV positive, so that measures can be taken to reduce the chance of transmitting the virus to the fetus.

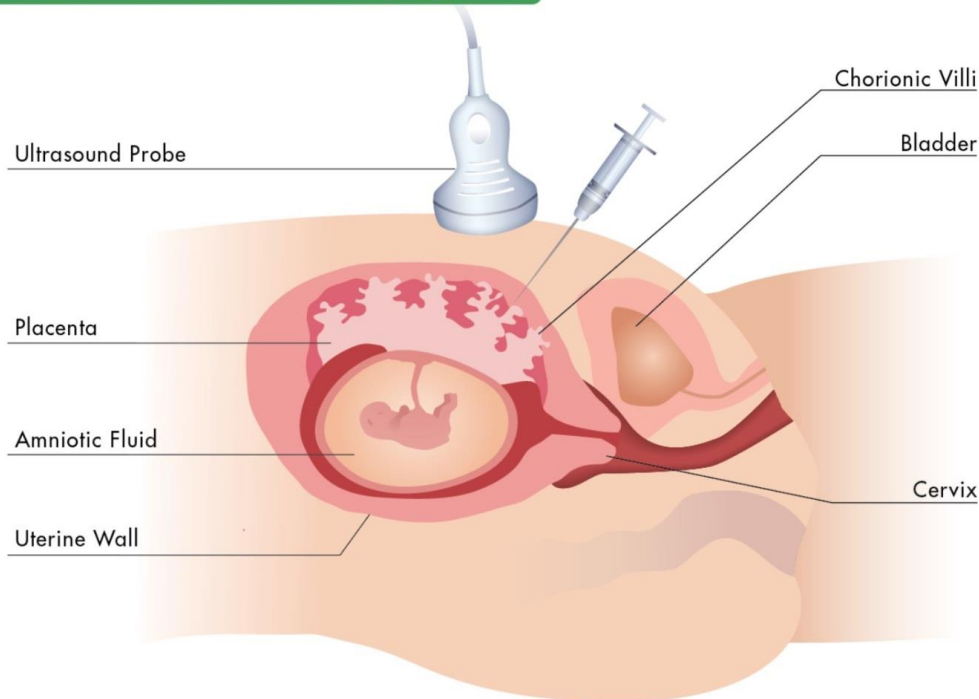
## What happens at the CVS?

The CVS will be done at Saint Mary's Hospital or at your local hospital in the scan (radiology) department by a doctor and a midwife. We recommend that you bring your partner or someone else to support you. You will not be able to drive yourself home after the procedure.

The doctor/midwife will discuss the procedure with you and take you through the consenting process. They will then scan your abdomen to check the positioning of the placenta. Occasionally the doctor will ask you to fully or partially empty your bladder.

You will first have an injection of local anaesthetic to numb the surface of your abdomen. Then a needle will be passed through your abdomen into the placenta. The needle is carefully monitored using an ultrasound scan during the procedure. This ensures that it is correctly positioned in the placenta and does not touch the fetus. The needle is then moved up and down to break off tiny pieces of placental tissue. The procedure lasts for a few minutes.

### Transabdominal Chorionic Villus Sampling (CVS)



(Reprinted from Greenwood Genetic Centre)

Sometimes the placenta cannot be accessed through the abdomen. Instead, it may be possible to have the test transvaginally, in which case the needle is passed through the vagina and cervix (neck of the womb). This alternative method carries a slightly higher risk of miscarriage.

## Does it hurt?

Anaesthetic will be applied to the skin (which you may feel as a brief, stabbing pain) but the abdominal muscle layers underneath cannot be anaesthetised. Most women describe an 'odd, uncomfortable' rather than 'painful' feeling as the needle passes through the muscle layers to reach the womb. The procedure usually only lasts a few minutes and most women cope quite well.

## What happens after the CVS?

Following the procedure, the midwife will talk to you about aftercare. For the first day or two you may have some cramping pain, like mild period pain. We advise you to take things easy for the first day or two and, if possible, take a couple of days off work. If you have a lot of pain or bleeding, lose any fluid, or develop a high temperature you should contact the hospital where you are booked for your antenatal care.

Usually the laboratory will be able to perform the test directly on the sample. Occasionally the sample is small and it may need to be grown in the laboratory for a few weeks. If there is not enough DNA or if the sample does not grow, the test cannot be performed. In this case, the possibility of repeating the procedure will be discussed with you.

## The results

Your genetic counsellor will discuss when we expect to have the results and how you would like to be informed. Occasionally, the results can be a bit more complicated than expected, in which case an appointment could be arranged to discuss this.

Following the result, if you decide to continue with the pregnancy you will remain under the care of your midwife and obstetrician. You can contact your genetic counsellor at any stage if you have further questions or concerns. If you decide not to continue with the pregnancy, your genetic counsellor or midwife will help make arrangements to end the pregnancy.

## Additional information and support

### Antenatal Results and Choices (ARC)

Provides support and information for women during the antenatal testing process.

Helpline: **0845 077 2290** or **0207 713 7486**

Email: [info@arc-uk.org](mailto:info@arc-uk.org)

Website: <http://www.arc-uk.org/>

**If you have any further questions about the amniocentesis please ask your genetic counsellor, doctor or midwife.**

Manchester Centre for Genomic Medicine  
Sixth Floor  
Saint Mary's Hospital  
Oxford Road  
Manchester  
M13 9WL

Telephone: (0161) 276 6506 (Reception)

Facsimile: (0161) 276 6145

The department is staffed Monday - Friday, 9.00 am to 5.00 pm.

Website: [www.mangen.co.uk](http://www.mangen.co.uk)

Seen in clinic by (Doctor): \_\_\_\_\_

And (Genetic Counsellor): \_\_\_\_\_

Telephone number: \_\_\_\_\_

Family reference number: \_\_\_\_\_

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