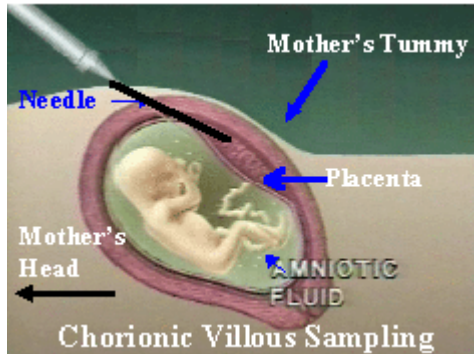


# Midlands Ultrasound & Medical Services Ltd

## Chorionic Villous Sampling

### Q. What is chorionic villous biopsy or sampling (CVB or CVS)?

This is where cells from the placenta or afterbirth are removed from inside the womb using a needle. The amount of cells removed is extremely small. This is normally done after about 11 weeks of pregnancy. The picture to the right shows a side view of the mothers body and how a CVS is performed.



### Q. Why do women have chorionic villous biopsy?

There are many reasons why women have chorionic villous biopsy;

- Certain women have an increased chance of giving birth to an infant with a chromosome problem e.g. Down's syndrome due to either their age, previous pregnancies or tests within pregnancy.
- There may be a personal or family history of a genetic problem which can be diagnosed whilst the baby is still at a very early stage of pregnancy.
- There may be a problem identified with the baby on the ultrasound scan which needs further tests.
- Some women just wish to know for definite that their baby does not have Down's syndrome.

### Q. How is chorionic villous biopsy done?

Before any test is performed you will have a discussion about the matter with the specialist performing the test. This is a time when you can ask many questions you may have been worried about. Your husband or someone close to you may stay with you for the entire consultation and procedure. Firstly, an ultrasound is performed of the baby. Using ultrasound, the afterbirth is seen and the best way to get the needle into the afterbirth is chosen. Then your tummy is cleaned with some cold cleaning fluid and covered with green sterile sheets. Then some local anaesthetic (pain killing drug) is injected into your skin. The needle for the test is then pushed through the numb area of your skin into the afterbirth by watching the ultrasound pictures. A smaller needle is then placed inside the first needle in your tummy and some of the cells are sucked up into a syringe. The smaller needle may need to be used more than one time as the number of cells may not be enough with the first passage of needle. The first needle is not moved so there is no more pain felt with inserting the smaller needle.

**Your partner can be present with you at all times but it is best not to have children in the room during the test.**

## Q. Are there any special preparations for chorionic villous biopsy?

No preparation is necessary for the test so don't worry about filling your bladder up before the test.

## Q. What are the advantages of chorionic villous biopsy?

Chorionic villous biopsy is a relatively safe procedure in the hands of an experienced doctor. In most cases, the obvious benefits of knowing about your baby prior to birth outweigh the risks of the procedure. The result takes about 2 working days to be processed. The speed with which the result is told to you is a common reason why people prefer this test.

## Q. How much discomfort is involved with chorionic villous biopsy?

Most women will feel a slight pressure or even a menstrual-like cramp when chorionic villous biopsy is performed. Afterwards, the discomfort may carry on for another day. Usually taking paracetamol is enough to give relief. Paracetamol is safe to take in pregnancy.

## Q. Will chorionic villous biopsy hurt my baby?

Injury to the baby during chorionic villous biopsy is extremely rare. If the procedure is carried out before 10 weeks there is a small risk for problems with the baby's arms or legs growing. This is not found in babies where the testing has occurred after 10 weeks. Continuous ultrasound monitoring is used during insertion of the chorionic villous biopsy needle. Care is taken to avoid placing the needle only in the placenta. The needle does not enter the sac where the baby is found.

## Q. What are the problems of chorionic villous biopsy?

### **Miscarriage.**

After chorionic villous biopsy, the risk of miscarriage is increased by 1% for the remainder of the pregnancy. Some miscarriages are destined to happen regardless of having the test and a lot fewer are caused by chorionic villous biopsy. Generally, the more experience the clinician has, the lower the miscarriage rate will be. In our **audited** experience, a pregnancy loss caused by a chorionic villous biopsy is the same as the fetal medicine centre in London at 1 in 100 tests performed. Sadly, if you were to miscarry this would happen in 50% of cases within the first 2 weeks after the test.

### **Immediate risks.**

Cramping may occur during chorionic villous biopsy and for a short while afterwards. Rarely you may have some blood loss from the vagina. Paracetamol is quite safe to take at this stage of pregnancy. Anything more than mild cramping or spotting should be notified to us or your local medical/midwifery team.

### **Repeat testing needed.**

Rarely (less than 1%), the doctor will not be able to obtain sufficient placental tissue or the laboratory test will fail to give a result. This does not mean that something is wrong with you or your baby.

## Q. What about the results?

The placental tissue collected is split into 2 portions. One portion is examined very quickly - the short term culture. This result is usually available within 1 to 2 working days after the test is performed. The remaining cells in the other culture are then grown in the laboratory to produce an increased number for examination. This is the longterm culture and takes up to 3 weeks to process. We use this second group of cells to be absolutely sure about our initial findings.

## Q. If the short term shows no Down's syndrome is present, how accurate is this?

If the result is normal then it is **extremely unlikely** - less than 1 in 100,000 that the other cells grown in the long-term culture will be abnormal. However, there is a small chance that there may be other problems with the chromosomes of clinical significance - about 1 in 500.

## Q. If the test results are normal, will my baby be healthy?

There is no test available that absolutely guarantees you will have a healthy baby.

## Q. What happens if the test results are abnormal?

You will be notified again by Mr Griffin about the test results. A further appointment will be made for you to discuss matters further. Please let us know your whereabouts over the next 48 to 72 hours and appropriate times and telephone numbers to be called on.

## Q. If the short term result is normal how accurate is this?

If the result is normal then it is **extremely unlikely** - less than 1 in 100,000 that the other cells grown in the longterm culture will be abnormal.

## Q. If the test results are normal, will my baby be healthy?

There is no test available that absolutely guarantees you will have a healthy baby.

## Q. Are the results really easy to understand?

Yes as rule they are. However, occasionally about one in 100 tests show a combination of both normal and abnormal cells. This can be difficult to understand and we need to wait for the second result after 2 to 3 weeks to understand the meaning of this result. Even then it may still be necessary to have another test such as an amniocentesis which purely examines the cells from the baby's skin or a blood test on your baby. The blood test is where we take some of the baby's blood from the umbilical cord whilst the baby is still in your womb. Sometimes we have to take blood from both the parents of the baby to see if the finding is due to something inherited from either parent.

## **Q. Is it possible to tell the sex of the baby?**

Yes it is possible to tell the sex of the baby but we will only tell you if you ask us.

## **Q. Why is it important to know your blood type and Rhesus status?**

If you are Rhesus negative you will need to receive a medication called Anti D after the chorionic villous biopsy is performed. Anti D is a medication which can prevent the problem of the baby's blood cells being destroyed by your immune system in future pregnancies. If the baby's father is also Rh negative, you will not need to receive Anti D. If you are Rh negative, ask your midwife or doctor to supply you with information about what it means to be Rh negative.