

What is CVS and how does it Work?

Chorionic Villus Sampling, or CVS, is an optional procedure that can be performed between approximately 10-14 weeks of pregnancy at a doctor's office that specializes in doing this procedure. CVS involves removing cells from part of the placenta called the chorionic villi. The placenta is a structure present during pregnancy that connects the baby to the mother. The placental cells collected through the CVS contain genetic information that is usually identical to that of the baby.

There are two ways to perform CVS, through the cervix or through the mother's abdomen. The method chosen depends on where the placenta is located, and that is determined by the doctor using ultrasound. The transcervical procedure involves inserting a thin straw-like tube through the cervix into the uterus to the edge of the placenta. The transabdominal procedure is done by inserting a thin needle through the mother's abdomen. No matter which way the CVS is performed, cells from the placenta are removed and sent to the laboratory for testing.

It typically only takes a few minutes to actually perform the CVS. Many women describe some discomfort during the CVS such as a cramping sensation. Most women have no complications from having a CVS. There is a small chance for miscarriage associated with CVS.

After the CVS, most women return to their normal activities within 1 to 2 days. It can take a couple of weeks for the complete test results to return.

How Certain are CVS Results?

CVS is a diagnostic test which means results are considered to be definitive for the conditions tested. In other words, this test can give you "yes" or "no" answers. Rarely lab errors or uncertain results may occur. In a small number of cases the baby's genetic information will be different from that of the placenta and further testing, such as amniocentesis, may be recommended to clarify uncertain CVS results.

What does CVS Test For?

The most common conditions detected by CVS are chromosome conditions, such as Down syndrome (Trisomy 21), Trisomy 18, Trisomy 13 and differences in the number of X or Y chromosomes. These conditions are all very different from one another. It is not always possible to know before a child is born how much their health will be affected. In some cases, additional genetic testing may be performed that can look for other genetic conditions. There are also specific tests that may be requested, (cystic fibrosis, muscular dystrophy, sickle cell anemia) if a known genetic condition runs in a family or an abnormal ultrasound finding is seen. (heart defect, skeletal abnormalities). It is important to know that CVS cannot detect all genetic conditions or birth defects. No test can guarantee the birth of a healthy baby.

How Do You Decide About CVS?

Making a decision about testing like CVS can be difficult because it is not risk-free. However, a diagnostic procedure such as CVS can provide more definitive information about genetic conditions in your baby and can provide information about more genetic conditions than other screening tests, such as blood tests and ultrasounds. Undergoing CVS can also allow for information at an earlier point in pregnancy than amniocentesis. Decisions about genetic testing in your pregnancy should be based on your own beliefs, values, needs and personality. See our video, *How to Decide About Prenatal Genetic Testing*, as you consider your prenatal testing options.

Credits

This video was created by the Washington State Department of Health and Genetic Support Foundation. You can find more information and additional videos about prenatal genetic testing options at: www.doh.wa.gov and www.geneticsupportfoundation.org.

Disclaimer

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