



CHORIONIC VILLUS SAMPLING

Your physician may offer or recommend prenatal testing using a procedure called chorionic villus sampling (CVS). CVS is typically performed between 10-13 weeks of pregnancy, and involves removing a small amount of placental tissue called chorionic villi, which are then tested for chromosome abnormalities. In a small percentage of cases, CVS may cause pregnancy complications, and in rare cases, miscarriage.

The decision to have prenatal genetic diagnosis is an important one; only you can decide if CVS is right for you. You and your partner will have the opportunity to ask questions during your genetics consultation to better understand the risks and benefits of pursuing CVS. The information provided below will acquaint you with our procedures and policies.

WHAT TO DO PRIOR TO YOUR VISIT

You may have a number of concerns regarding CVS and its risks. We suggest you write down your questions. We will be sure to address them during your genetics consultation.

FAMILY HISTORY

It would be helpful if you and your partner review your family histories. It is important to identify any relatives who have inherited conditions, birth defects, chromosomal conditions such as Down syndrome, or who have had any stillbirths or more than two miscarriages. In some cases, medical records on the affected individual may be required in order to provide accurate information about recurrence risks. If you have a specific concern about a genetic condition in your family history and would like to discuss options for prenatal testing for the condition, it is recommended that you schedule a separate genetics consultation prior to the day of your CVS procedure.

Rh BLOOD TYPE

If you decide to have CVS, it is important that your blood group and Rh type be documented prior to your appointment. A RhoGam injection must be administered to all Rh negative women to prevent the possibility of Rh sensitization. Please ask your physician to FAX documentation of your blood type. A blood donor card is also sufficient. If both you and your partner are Rh negative, you will not need to receive RhoGam; however, documentation of his Rh type is required. If documentation of your blood type is not received, or if you are Rh negative and will be receiving RhoGam, please allow for extra time on the day of your appointment.

FULL BLADDER

A full bladder is required at the time of the CVS procedure since this is necessary for optimal ultrasound visualization during the procedure. It is not necessary, however, to arrive with a full bladder since your genetics consultation will last approximately 1 hour. If your bladder is not full at the time of the CVS procedure, it may be necessary to delay the CVS.

There are no other specific instructions to prepare for your visit. A light breakfast is recommended.

WHAT TO DO ON THE DAY OF YOUR APPOINTMENT

It is imperative that you arrive at your appointed time. Please plan to spend a total of 2-3 hours completing all portions of your appointment.

You will first have a genetics consultation at Dr. Pergament's office, located at 680 North Lake Shore Drive, Suite 1230. This appointment is to discuss your family histories, the risks for chromosome abnormalities, and to address your questions and concerns. Although every effort is made to stay on schedule, there are times when a delay is unavoidable. Your patience and understanding is appreciated if any delay occurs.

Following your consultation at Dr. Pergament's office, you will be directed to the Northwestern Center for Genetic Medicine for the CVS procedure. Your CVS will be performed by Dr. Lee Shulman or Dr. Jeffrey Dungan.

THE CVS PROCEDURE

CVS involves removing a small amount of placental tissue called chorionic villi, which is expected to have the same genetic makeup as the developing fetus. This sample will be cultured and analyzed for chromosome number and structure, and in the case of prenatal testing for a hereditary genetic condition, the presence of the gene mutation previously identified in the family.

There are two approaches to sampling the placenta. Both are performed under ultrasound guidance. The most common method is called transcervical CVS. The patient lies on an examination table with her legs supported by stirrups. After a thorough ultrasound examination, the physician performing the procedure inserts a speculum and cleanses the vaginal area and cervix with an antiseptic called betadine. In some cases, the physician will place a tenaculum (clamp) on the cervix to hold it in place; you may feel a pinch at that time. Then, a thin, hollow, plastic catheter (tube) will be advanced through the vagina and cervix to reach the placenta. A small amount of chorionic villi will be removed through a syringe attached to the end of the catheter.

The second method, called transabdominal CVS, is also done after a thorough ultrasound examination and under ultrasound guidance while the patient lies flat on an examining table. After cleansing the abdomen with betadine, a thin, sterile needle is inserted through the skin, the uterine wall, and into the placenta. The sample is removed through a syringe attached to the end of the needle.

The physician performing CVS will determine which of these two methods is safer and easier to do based on placental location, uterine position, or the presence of a vaginal infection. The entire process will take approximately 30 minutes; the CVS itself takes less than one minute. Your partner may accompany you for all portions of your appointment, including your genetics consultation, ultrasound evaluation, and the CVS procedure.

WHAT TO DO FOLLOWING YOUR CVS

A recovery period following the procedure is not necessary. You should be able to resume normal activities, but we suggest you refrain from heavy lifting, strenuous exercise (such as jogging, aerobics, and tennis), and sexual activity for 24-48 hours following the CVS. It is a common occurrence to experience spotting and/or uterine cramping similar to menstrual cramps after CVS. If you have more serious difficulties or other symptoms, please contact your obstetrician's office or your obstetrician's emergency line if it is after hours. Please inform us of any symptoms or complications as well.

WHEN AND HOW RESULTS ARE PROVIDED

FISH results are usually available on the same day of the procedure, and provide a result for chromosomes 13, 18, 21, X, and Y. You will be called with this result as soon as it is available. The full chromosome report is usually available approximately 2 weeks after the procedure. You will be called as soon as the final studies are complete. A written report will also be sent to both you and your physician.

QUESTIONS?

If you have any questions concerning the above information, please do not hesitate to contact us at 312-981-4400.