

Special Procedures during Pregnancy

Chorionic Villus Sampling (CVS)

Chorionic villus sampling or CVS is a procedure used to diagnose genetic problems in the baby. When indicated, it is normally performed between 10 and 12 weeks. Chorionic villi are tiny parts of the placenta formed from the fertilized egg which have the same genes as the fetus. A specially trained doctor performs the CVS by either passing a small tube through the vagina and cervix or by inserting a thin needle through the abdomen and the wall of the uterus. A small sample of cells is taken from the placenta and sent to a lab. The cells are grown and tested in the lab to detect some chromosomal defects. Chorionic villus sampling carries risks, including the small risk of miscarriage (about 1%).

CVS cannot detect open neural tube defects. So if you choose to have a CVS, when indicated, you may want to consider having a blood AFP test later in pregnancy to screen for neural tube defects.

Amniocentesis

An amniocentesis is another procedure used to diagnose genetic defects in the baby. This procedure, when indicated, is performed between 15 & 20 weeks of pregnancy. During an amniocentesis, ultrasound is used to help a doctor guide a thin needle through the abdomen and uterine wall. A small sample of amniotic fluid is removed and sent to a lab. The lab uses the amniotic fluid to culture cells that have been shed from the baby. These cells are used to determine if the baby has any chromosome abnormalities. Testing the alpha fetoprotein (AFP) level in the fluid can also help determine if the fetus has a neural tube defect. Special testing for certain genetic disorders such as muscular dystrophy or cystic fibrosis can be performed when there is a family history increasing the risk of its occurrence.

Possible side effects with amniocentesis include cramping, vaginal bleeding, and leaking of amniotic fluid. The risk of miscarriage is low (about 0.5%), and injury to the fetus is rare.

Non-Stress Test (NST)

A non-stress test is conducted to determine the health status of the baby. During the nonstress test, you lie on an examination table. A contraction monitor and an ultrasound transducer are attached to two belts placed around your abdomen. The heart rate and movement of the baby are monitored. The fetal heart rate of the baby often rises when he or she moves. These changes in the baby's heart rate are a sign of good health. If the baby is not active during the nonstress test, he or she may be asleep. A small buzzing device may be placed on the abdomen to produce sound and vibration which will wake the baby and cause movement. This is called vibroacoustic stimulation.

Special Procedures during Pregnancy (Cont'd)

Biophysical Profile (BPP)

A biophysical profile assesses fetal well-being. There are five parts to this test. One part is a nonstress test. The other four areas of the test are assessed by using ultrasound. These four areas are breathing movements, body movements, muscle tone, and the amount of amniotic fluid. Each part of the test is given a score of 0-2 points during a 30 minute period. The total possible number of points on a biophysical profile is 10. A normal score is 8 to 10. The score helps your doctor decide whether you need additional testing or special care. In some instances the test may help determine whether the baby should be born sooner than planned.