What is Amniocentesis and How Does it Work?

Amniocentesis is an optional procedure that can be done in pregnancy to test for certain genetic conditions and birth defects. Amniocentesis is usually performed at approximately 15-20 weeks of pregnancy at a doctor’s office that specializes in doing this procedure. Using ultrasound as a guide, a very thin needle is inserted through the mother’s abdomen into the amniotic sac, a fluid filled area surrounding the baby. A small amount of fluid is withdrawn and sent to the laboratory for testing. This fluid contains some of the baby’s cells. Just as you shed skin cells every day, so does the baby. Each of the baby’s cells contains the baby’s genetic information. The lab can look at the cells to determine if there are certain genetic conditions present in the baby.

Typically, it only takes a couple of minutes to perform an amniocentesis. Many women experience some brief discomfort with amniocentesis such as a sensation of cramping, pressure or pinching. Usually women return to their normal activities within 1-2 days following amniocentesis. It can take about two weeks for the complete test results to return from an amniocentesis.

What can Amniocentesis Test For?
The most common conditions detected by amniocentesis are chromosome conditions, such as Down syndrome (Trisomy 21), Trisomy 18, Trisomy 13, and differences in the number of X or Y chromosomes. Amniocentesis can also detect open neural tube defects, such as spina bifida, if requested. 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 ordered to look for other conditions. There are other specific genetic tests that may be requested, if a known genetic condition runs in a family, (cystic fibrosis, muscular dystrophy or sickle cell disease) or an abnormal ultrasound finding is seen (heart defect, skeletal abnormalities). It is important to know that amniocentesis cannot detect all genetic conditions or birth defects. No test can guarantee the birth of a healthy baby.

How Certain are Amniocentesis Results?
Amniocentesis 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.

What are the Risks Associated with Amniocentesis?
Amniocentesis does increase the risk for some complications including leaking of amniotic fluid. Over 99% of the time, no serious complications occur. There is a small chance of miscarriage from having an amniocentesis.

How Do You Decide About Amniocentesis?
Making a decision about amniocentesis can be difficult because it is not risk-free. However, a diagnostic procedure such as amniocentesis 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. 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**

The content of this video is for informational purposes only and is intended to educate consumers about health care issues and choices. This information is not a substitute for professional medical advice, diagnosis, or treatment. You should always consult with your physician before making medical decisions or electing to undergo any medical testing or treatment, or if you have any questions or concerns about your health. This project was supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) under grant number(93.994) Title V Maternal and Child Health Block Grant. This information or content and conclusions are those of the authors and should not be construed as the official position or policy of, nor should any endorsements be inferred by HRSA, HHS or the U.S. Government.

* Highlighted Version Not Spoken