

What is an amniocentesis?

An amniocentesis is a test done to obtain a sample of the amniotic fluid (the water) surrounding the fetus (baby). This test is usually done at about the 16th week of the pregnancy and is performed in Thunder Bay.

It is important to be aware that every pregnant couple in the general population has a 2-3% risk of having a baby with a birth defect. While normal results of prenatal testing are reassuring, they do not guarantee the birth of a healthy baby.

AMNIOCENTESIS



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WHAT CAN AN AMNIOCENTESIS TELL ME?

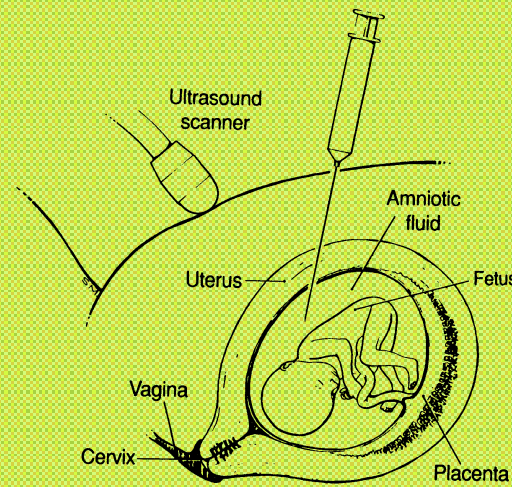
The cells in the amniotic fluid will provide information about the chromosomes of the developing fetus. Occasionally, the cells will be used to test for a specific gene or chemical (metabolic) abnormality. The amount of alpha fetoprotein (AFP) in the amniotic fluid is also measured. A small amount of AFP, a protein made by every developing baby, passes into the amniotic fluid. A greater than average amount of AFP is found in the amniotic fluid of babies with neural tube defects and some other less common abnormalities. In general, most but not all chromosomal abnormalities and open neural tube defects can be detected during testing.

HOW IS AN AMNIOCENTESIS DONE?

This procedure usually takes about 10-15 minutes. It involves the following steps:

1. The doctor will use ultrasound to locate the position of the placenta, the fetus and decide on the best "pocket" of amniotic fluid to sample.
2. Your lower abdomen is washed with an antiseptic solution and covered with a sterile towel.
3. A fine needle is guided by ultrasound through the abdominal wall and into the uterus. Some women feel a slight cramp at this time, while others only feel a push and pull sensation.
4. About 2 tablespoons of amniotic fluid is withdrawn through the needle. The fluid will be replaced by your body within a few hours.

You will rest for about 15 minutes after the procedure and then can go home. Strenuous activities should be avoided for the rest of the day.



The Amniocentesis Procedure

WHAT ARE THE RISKS OF AMNIOCENTESIS?

Minor complications such as cramping, spotting and a small amount of amniotic fluid leakage occur occasionally. These are usually not serious but should be reported to your doctor if they occur.

Maternal infection and a needle stick injury to the fetus are very rare.

Amniocentesis increases the risk of miscarriage by about 1 in 200, or 0.5%. The natural risk of miscarriage at 16 weeks of pregnancy is about 2%, increasing the overall risk of miscarriage to about 2.5%.

WHAT ARE THE LIMITATIONS OF AMNIOCENTESIS?

Amniocentesis cannot detect many birth defects, including serious malformations such as congenital heart defect, cleft lip and palate, and many others.

On occasion the doctor will not get a sample of amniotic fluid. This happens about 1 in 200 amniocenteses. If this happens a second appointment can be set about a week later when the size of the uterus and the amniotic fluid volume is greater.

In some cases the cells do not grow well enough to be examined adequately. This occurs in about 1 in every 2000 amniocenteses. This situation would be discussed with you and a second amniocentesis may be recommended.

When amniotic fluid is obtained, cells from the mother's tissues may contaminate the sample. The chance of this happening is very small.

Occasionally the results of the testing may be difficult to interpret for a variety of reasons. In some cases chromosomal variation may be found in the fetus. Blood samples may then be requested from both parents, to determine whether the finding in the fetus represents a normal variation, an inherited change or a new change in the fetus. The results will be discussed with you.

Each chromosome is made up of many genes. The individual genes cannot be seen under the microscope. A chromosomal defect must be large enough to alter how the chromosome appears under the microscope. The specific genes are not tested unless your obstetrician or the geneticist requests a specific test based on a family history of a genetic disorder.

WHEN WILL THE RESULTS BE AVAILABLE?

Results usually are ready within 2-3 weeks. Your doctor will contact you with the results.

WHAT IF MY TEST RESULTS SHOW THAT THERE IS A PROBLEM?

Any abnormality in the results will be discussed with you. The options available would be to continue with the pregnancy or you may choose to end the pregnancy. Decisions relating to those results will be entirely your own.

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