

Amniocentesis

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INTRODUCTION — Amniocentesis is a test done during pregnancy to get information about the fetus. The most common reason for amniocentesis is to determine for sure whether a fetus has certain genetic problems, such as Down syndrome. This test is usually done between 15 and 17 weeks of pregnancy.

Amniocentesis can also provide information about:

- Neural tube defects (such as spina bifida or anencephaly)
- Blood type of the fetus (which can be important if the mother's blood contains antibodies that can react with the fetus's red blood cells)
- Genetic disorders in the fetus, such as sickle cell anemia
- Infection in the fetus
- Readiness of the fetus's lungs to live outside the uterus (if done late in pregnancy)

More detailed information about amniocentesis is available by subscription. (See "Amniocentesis: Technique and complications".)

AMNIOCENTESIS PROCEDURE — The first step in the procedure is to perform an ultrasound of the uterus. With ultrasound, the doctor can see the fetus, amniotic fluid, and the placenta.

After cleaning the abdomen, the doctor inserts a needle and uses the ultrasound picture to guide the needle safely into a pocket of amniotic fluid. The doctor removes a small amount of fluid (about one ounce). The needle stick is mildly uncomfortable or crampy.

Occasionally, the doctor will need to insert the needle more than once to get enough fluid. If there is more than one fetus, the doctor may need to take a sample of fluid from around each fetus.

The sample of amniotic fluid is then sent to a laboratory for testing. In a small number of cases, the fluid does not have enough cells. In these rare cases, you may be asked to have another amniocentesis.

AMNIOCENTESIS COMPLICATIONS — Amniocentesis involves certain risks. Complications can include:

Leakage of amniotic fluid — Leakage of amniotic fluid sometimes happens after amniocentesis. In most cases, there is only a small amount of fluid leakage that stops on its own within one week.

In rare cases, leakage can be ongoing. If this occurs, the mother and fetus are monitored closely for signs of problems, such as infection. In these rare cases, there is an increased risk of pregnancy complications, including preterm delivery. The risk of these complications usually depends on how much fluid is left around the fetus.

Injury to the fetus — There might be a very small increased risk of problems developing in the fetus because of amniocentesis. This might include clubfoot, hip dislocation, and lung problems. Talk to your doctor about these risks before having amniocentesis.

Infection — If you have a chronic infection, like HIV, cytomegalovirus, hepatitis C, or toxoplasmosis, there is a chance that your fetus could become infected because of the amniocentesis. The risk is probably very small, but you should talk to your doctor about the risks if you have one of these infections.

Miscarriage — Studies have shown that women who have amniocentesis have a small increased risk of miscarriage. Fortunately, this complication is rare. The risk of miscarriage related to amniocentesis is estimated to be 1 in 300 to 500 (0.2 to 0.3 percent) [1].

AFTER THE AMNIOCENTESIS — Immediately after the procedure, some women have mild cramping, a small amount of vaginal bleeding, and a small amount of amniotic fluid leaking from the vagina. This should all resolve quickly.

However, you should call your doctor if:

- You continue to leak fluid or bleed
- You have severe cramping lasting several hours
- You have a fever (temperature higher than 100.4°F or 38°C) after the amniocentesis

Some doctors recommend that you avoid having sex and exercising on the day of the amniocentesis. You can resume your normal activities the day after the amniocentesis.

Women who have Rh negative blood type (eg, A, B, AB, or O negative) are usually given a shot called Rh(D) immune globulin (RhoGam®) after amniocentesis. This shot helps protect future pregnancies against problems that can develop if you are Rh negative and you are pregnant with a fetus who is Rh positive.

AMNIOCENTESIS RESULTS — Most labs are able to provide results within 7 to 14 days. Ask your doctor or nurse when you can expect to have the results.

OTHER TESTING OPTIONS — Amniocentesis is one option that you have to get information about your fetus. It is not a required test. You should discuss the risks and benefits of this test with your doctor.

The only test that provides information comparable to amniocentesis is chorionic villus sampling (CVS). CVS can be done earlier in the pregnancy than amniocentesis (at 10 to 12 weeks of pregnancy). However, CVS has risks that are similar to amniocentesis (leakage of fluid, infection, miscarriage). More information about CVS is available separately. (See "Patient information: Chorionic villus sampling".)

There are other tests that can provide some information about your fetus's risk of having Down syndrome. However, these tests do not tell you for sure if your fetus is affected. They only provide you with information about the probability of the fetus having Down syndrome. Some women prefer to have this type of test, called a screening test, before making up their mind about having an invasive test like amniocentesis or CVS.

More information about screening tests is available separately. (See "Patient information: Should I have a screening test for Down syndrome during pregnancy?".)

WHERE TO GET MORE INFORMATION — Your healthcare provider is the best source of information for questions and concerns related to your medical problem.

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