AMNIOCENTESIS

You have probably heard of "amniocentesis" (sometimes called "amnio") before, though you may know only that it is a test some pregnant women have. Now that you are thinking about amniocentesis, you may have a few questions like the ones below.

What is amniocentesis?

Generally speaking, amniocentesis is a prenatal test that involves withdrawing a small amount of *amniotic fluid* from your uterus (your womb). This clear, almost colorless fluid surrounds and protects your unborn baby (fetus). A growing fetus produces some of the cells found in amniotic fluid. When laboratory technicians look at these cells under a powerful microscope, they can learn much about the health of your baby.

Amniocentesis for prenatal diagnosis tests for chromosomal disorders, neural tube defects, and specific metabolic disorders.

Why should I have amniocentesis?

Anmiocentesis is a fairly common prenatal test, but not every pregnant woman should have one. Because it does pose a *slight* risk to you and your baby, your doctor should only recommend the test for you if

- you are at least 34 years old;
- you or your family has a history of *chromosome abnormalities* (like a chromosome rearrangement of Down syndrome), *neural tube defects* (like spina bifida), or a *specific, single-gene disorder* (like cystic fibrosis) that a laboratory test can detect; or
- you have had earlier prenatal tests with abnormal results.

You should usually be between the *fourteenth* and *sixteenth week* of your pregnancy to have an amniocentesis. In some situations, though, you can have an amnio a little earlier or a little later in your pregnancy.

What happens during amniocentesis?

Your doctor will use an *ultrasound scan* (also called *sonogram*) before and during your amnio. An ultrasound scan uses sound waves to project an image onto a screen that is much like a television screen. Your doctor can them see the position of the fetus and the placenta inside your uterus. (The placenta is the organ that nourishes the fetus through the *umbilical cord* and attaches it to your uterus.)

The ultrasound scan will help your doctor find the best place to take out the amniotic fluid. It also will help your doctor to see if you are carrying twins and if you have been pregnant at long as you thought. When your doctor has found a safe place to take out the fluid, he or she will use a special needle to draw out about *two or three tablespoons* of it.

Your doctor's office will send your amniotic fluid sample to the Cytogenetics Laboratory, or to another laboratory, for testing. *You should know the result of your anmiocentesis test about two weeks after you have it.*

Does amniocentesis hurt?

Many doctors will deaden part of your skin before they put the needle in. So, most women say they feel no or only a little pain from the pierce of the needle. Still, you can expect to feel some cramping and pressure on your uterus during your amnio.

What risks does amniocentesis involve?

The risks to you are slight. You might have mild cramps or light spotting for a day or two after your amnio, but you can probably go back to your normal activities soon.

Your doctor will use ultrasound to see the fetus and placenta and will watch them carefully during your amnio. So, the chance that the needle will touch or harm your baby is small. The loss of a few tablespoons of amniotic fluid is not very important, since the fetus is always making more of it.

The most serious risk with amniocentesis is that of *miscarriage.* Miscarriages occur in about 0.3% of all amniocentesis tests — *less than one of every three hundred tests.*

Your doctor will talk with you more about the risks to you and your baby.

What will the test result tell me about my baby?

Because genetic technology cannot find every possible birth defect, *a normal amniocentesis test result does not guarantee that your baby will be healthy and not have any birth defects.* Yet, amniocentesis can help to rule out some genetic disorders you may be at risk for because of your age or family history.

When your amniocentesis test result is ready, your doctor will look at it along with your other prenatal test results and your family's medical history. All these facts taken together can help your doctor know more about your baby's chances for being born with certain birth defects or genetic disorders. The amnio result will also tell you if your baby is a boy or a girl, if you want to know.

What if the test result is abnormal?

If your amnio result does show that your baby will be born with a genetic disorder, a genetic counselor or doctor will meet with you to help you understand

- how the disorder will affect the way your baby will develop physically and mentally,
- how doctors can treat some of the effects of the disorder, and
- how the disorder will affect your child throughout his or her life.

You may also be able to meet and talk with parents of children who have the same disorder.

When you have learned all you can about the disorder, you will have the weighty option to continue your pregnancy or to end it. This decision will be a very important one that you will need to make for yourself when and if the time comes. Your doctor and genetic counselor will inform, support, and encourage you, but *no one will ever pressure you into a decision that is not yours alone.*