



You have been referred to the Calgary Maternal Fetal Medicine Centre for an amniocentesis. This sheet is designed for your general information. If you have specific questions, please feel free to ask one of our staff or your physician prior to the procedure.

In every pregnancy there is a small risk of carrying a fetus with a major chromosome abnormality, such as Down Syndrome (Trisomy 21). These abnormalities can only be diagnosed prenatally with certainty by invasive testing such as amniocentesis.

You may wish to have an amniocentesis if:

- Your screening test such as First Trimester Nuchal Translucency Screen, Maternal Serum Screen or Prenatal cell-free DNA screening reveals an increased risk for a chromosome abnormality
- You previously carried a fetus with a major chromosome abnormality
- You have a personal or family history of a disorder that amniocentesis could detect

What are the risks associated with this procedure?

There is a slightly increased risk of miscarriage following amniocentesis (less than 1:500). The best current evidence suggests that out of 1000 people undergoing amniocentesis, one or two will miscarry because of the procedure. This compares with 5-10 per thousand who will miscarry spontaneously whether or not they have the procedure (this is the background risk of miscarriage at 15-16 weeks). We do not usually offer amniocentesis prior to 15 weeks due to an increased risk of complications.

If you wish to proceed with amniocentesis, go about your normal activities prior to the test. There are no dietary restrictions for amniocentesis, and you do not require a full bladder.

A nurse will call you ahead of your procedure and provide you with personal counseling at which time the risks, benefits and limitations of the procedure will be further explained to you.

During The Procedure:

Ultrasound is used to determine the size of your baby, the position of the placenta and the amniotic fluid volume around your baby. The skin of your abdomen will be cleaned with an iodine solution. Using ultrasound, the physician will insert a thin needle through your abdomen. A small amount of amniotic fluid will be removed and sent for a chromosome test, and any other specific indications requested by your geneticist or physician. Ultrasound will be used to check that there have been no immediate complications after the procedure is done and you are then free to go home.

Following The Procedure:

We recommend that you avoid strenuous activity and sexual intercourse for 24 - 48 hours after the procedure. Many patients notice mild cramping, a small amount of clear watery or bloody vaginal discharge, or general discomfort for 1 - 2 days after an amniocentesis.

If you experience a gush of fluid or blood vaginally, marked cramping, fevers, or chills, please call your doctor as soon as possible.

Limitations And Risks:

- 1. Failure to obtain fluid:** This happens on rare occasion for a variety of reasons. If this occurs in your situation, the doctors and nurses will explain why and reschedule your appointment as appropriate.
- 2. Birth defects/structural abnormalities:** Amniocentesis does not evaluate whether or not the baby has structural abnormalities, and can't identify all inherited disorders/syndromes related to chromosome abnormalities. A detailed ultrasound at 19 weeks gestation is recommended in all pregnancies. Your physician should schedule this appointment for you.
- 3. Multiple gestations:** If you are carrying more than one fetus, we recommend discussing these circumstances with a genetics counselor or our nurse prior to proceeding with amniocentesis.
- 4. Miscarriage:** Amniocentesis is a safe procedure, and all the doctors performing this test at the Calgary Maternal Fetal Medicine Centre have considerable experience with this test. Even in the best of circumstances, amniocentesis does appear to increase the risk of miscarriage by approx. 0.1-0.2% (less than 1:500) compared to the general pregnant population.
- 5. Inability to interpret amniocentesis results:** On rare occasions, a result will be obtained following amniocentesis that cannot be interpreted. If this occurs, further consultation with a medical geneticist is recommended and further testing may be warranted.
- 6. Failure of cells to grow:** Before the cells can be analyzed, they must be grown in the laboratory. On very rare occasions, cells may not grow and an additional sample may be needed.

Obtaining a final result generally takes between 3 days and up to 3 weeks, depending on the testing requested. You will be notified by telephone as soon as the results are available.

The Calgary Maternal Fetal Medicine Centre, established by EFW Radiology in collaboration with Calgary's maternal fetal medicine specialists, is the only centre of its kind in Canada.

The Centre has a focused team of radiology and maternal fetal specialists, who are recognized nationally and internationally for their work in maternal fetal medicine, radiology and obstetrical imaging. They are supported by a highly qualified staff of perinatal nurses and ultrasonographers.

The Centre is a unique hub of medical expertise, research and education in maternal fetal medicine for patients of obstetricians, family doctors and midwives in southern Alberta, south eastern British Columbia and south western Saskatchewan.

Services at the Centre are fully covered by provincial health care insurance plans so all patients can benefit from the concentration of medical experience, specialized practice backgrounds and advanced equipment.