

What is an Amniocentesis?

Amniocentesis is a procedure performed during pregnancy to examine a baby's chromosomes. Most often, an amniocentesis is done between 16 and 20 weeks of pregnancy (gestation). During this procedure, amniotic fluid is removed for testing. The amniotic fluid contains cells that the baby has naturally shed. Cells and proteins within the amniotic fluid are examined in the lab to test for specific fetal disorders. Alpha-fetoprotein (AFP) is also found in the amniotic fluid and can be measured in the laboratory. The entire amniocentesis appointment lasts approximately 45 minutes – most of which involves a detailed ultrasound examination.

Do I Need to Have an Amniocentesis?

Amniocentesis is offered for:

- a woman who will be 35 years old or more at time of delivery.
- a couple with a child or other family member with a chromosomal abnormality.
- a woman with a positive screening test result (for example, Expanded AFP test).
- a couple in which one partner has a chromosomal rearrangement (for example, a translocation or an inversion).
- a couple with an increased risk of having a child with a genetic disease for which testing is available.
- a couple with a previous pregnancy or child with a neural tube defect (for example, spina bifida or anencephaly).

How Do I Schedule My Amniocentesis?

The staff at the Prenatal Diagnosis Center schedules the amniocentesis procedure. Amniocentesis is performed at the Prenatal Diagnosis Center, California Pacific Medical Center, 3700 California Street, 4th Floor – Room 4360 (California Campus) and at various outreach clinics in the Bay Area. Speak to the staff at (415) 600-6400 to schedule an amniocentesis procedure in one of the outreach clinics. They will also provide you with directions and parking information so you know exactly where to go for your procedure.

How Do I Prepare for an Amniocentesis?

- You will be given instructions on how much water to drink prior to your ultrasound test. A full bladder is necessary for the ultrasound procedure.
- Do not take any Aspirin or Aspirin-containing products five (5) days prior to the amniocentesis procedure, and do not take Heparin or Lovanox 24 hours prior to the amniocentesis procedure.

What Can I Expect During an Amniocentesis?

- First, the technician performs a detailed ultrasound examination. This takes about 30 minutes to complete. The technician checks the date of your pregnancy, screens for birth defects, checks the placenta, and evaluates the amniotic fluid levels.
- Next, using ultrasound, the doctor chooses a "pocket," or area of amniotic fluid, for testing. Then, the doctor inserts a thin needle into the abdomen and uterus, and removes a small amount of fluid (about one ounce). This part of the procedure lasts about 1–2 minutes.

Is There Discomfort with an Amniocentesis?

- Most women experience minimal discomfort with an amniocentesis. Some women do experience cramping during and after the procedure; the cramping usually goes away after a short time.
- Some women may also experience abdominal soreness at the site of the needle insertion. Note: Soreness at the needle insertion site usually goes away within a few hours, but may last a few days.

What Can I Expect After an Amniocentesis?

- After the procedure, you should go home to rest for about 2 hours. You will be given a detailed instruction sheet on what to expect following an amniocentesis.
- You may drive yourself home after an amniocentesis procedure.
- Generally, women may resume their regular activities 72 hours after the amniocentesis procedure. We advise the following activity limitations after an amniocentesis:
 1. No lifting over 15 pounds for 24 hours.
 2. No strenuous exercise or strenuous work activity for 72 hours.
 3. No air travel for 72 hours.
 4. No intercourse for 72 hours.

Are There Any Risks Associated with an Amniocentesis?

- **Spotting, cramping and/or light bleeding (less than a menstrual period) may occur.**
- There is a natural miscarriage rate throughout pregnancy. An amniocentesis increases the natural rate of miscarriage.¹ The most recent data shows that about 1 in 1,600 women may have a miscarriage as a result of the amniocentesis.²

Call (415) 600-6400 If You Experience Any of the Following Symptoms

- **Severe cramping.** It is normal to experience some cramping, which usually resolves in a few hours.
- **Contractions or abdominal pain.**
- **Clear, watery vaginal discharge or vaginal bleeding.** Occasionally, a woman may have some small leaking of fluid, spotting, or bleeding (less than a menstrual period). The treatment for these symptoms is bed rest, but please call for further guidance.
- **Fever of 100.4 °F or 38 °C.**
- **Any changes with your pregnancy that are of concern.**

What Can be Detected by an Amniocentesis?

- Chromosome problems such as Down syndrome.
- Measurement of the AFP will detect the majority of neural tube defects such as spina bifida.
- When a history of a genetic disease is known in a family, further testing may be needed such as DNA or enzyme testing.

¹ State of California, Health and Human Services Agency (2004). Statement of Informed Consent/Refusal for Amniocentesis. Department of Health Services, Genetic Disease Branch, Chief of the Genetic Disease Branch, George C. Cunningham, MD, MPH, Richmond, CA.

² Eddleman, K.A, Malone, F.D., Sullivan, L., et al. (2006). Pregnancy loss rates after midtrimester amniocentesis, *Obstet. Gynecol.*, 108,1067.

When Will I Receive the Results? Are the Results Accurate?

- Results of the chromosome study and the AFP measurement are usually available in 10 - 12 days. Additional studies may take longer.
- Chromosome results are greater than 99% accurate.
- AFP testing detects greater than 90% of open neural tube defects. The accuracy of any additional testing may vary depending on family history and testing method.
- Occasionally, test results may require a need for a further ultrasound examination or blood tests of the parents. Rarely, a repeat amniocentesis or fetal blood sampling may be recommended.
- **No method of prenatal testing can guarantee that a baby will be born without birth defects, genetic disease, or mental retardation.**

How Can I Learn More About this Procedure?

- Call (415) 600-6400 and ask to speak with a Genetic Counselor at the Prenatal Diagnosis Center.
- Go to www.cpmc.org/learning.

Notes & Questions to Ask My Doctor

Frequently Asked Questions

Question: What is an Amniocentesis?

Answer: Amniocentesis is a procedure performed during pregnancy to examine a baby's chromosomes. Most often, an amniocentesis is done between 16 and 20 weeks of pregnancy (gestation).

Question: Can I drive myself home after an amniocentesis procedure?

Answer: Yes, you may drive yourself home after an amniocentesis.

Question: When can I go back to work?

Answer: You may return to work the day after the procedure. Follow the the activity limitations following an amniocentesis. See page 2 of this handout for all activity limitations.

Question: When will I receive the results?

Answer: Results of the chromosome study and the AFP measurement are usually available in 10–12 days. Additional studies may take longer.

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Note: This information is not meant to replace any information or personal medical advice that you get directly from your doctor(s). If you have any questions about this information, such as the risks or benefits of the treatment listed, please ask your doctor(s).