



## Thoracentesis

Thoracentesis is a procedure to remove fluid from the space between the lining of the outside of the lungs (pleura) and the wall of the chest. Normally, very little fluid is present in this space. An accumulation of excess fluid between the layers of the pleura is called a pleural effusion. Fluid inside the pleural space may be found during a physical examination and is usually confirmed by a chest x-ray.

Accumulation of excess pleural fluid may be caused by many conditions, such as infection, inflammation, heart failure or cancer. If a large amount of fluid is present, it may be difficult to breathe.

Why is a thoracentesis done?

- To help determine the cause of the fluid accumulation
- To relieve the symptoms associated with the fluid accumulation

How is a thoracentesis done?

- A thoracentesis can be done as an outpatient. No special preparation is needed.
- You do not need to withhold food or fluids before the procedure and an IV is not needed since IV sedation is not required.
- You will sit on the edge of a bed with your head and arms resting on a table. The skin around the procedure site, on the back, is disinfected and a local anesthetic is injected into the skin. There can be a stinging sensation when the local anesthetic is injected. The excess fluid is withdrawn with a special needle that is inserted above the rib into the pleural space. You may feel a sensation of pressure when this needle is inserted. A band-aid is placed on the needle site after the procedure.
- Most people do not have any discomfort when the thoracentesis is completed. If you have had any symptoms, such as shortness of breath, due to the excess fluid you will breathe easier after the fluid is removed. A chest x-ray may be done after the procedure to make sure there are no complications.
- You will be able to go home after you've had time to relax a while and have something to drink and your physician has received the results of your chest x-ray.

### Ultrasound guidance

An ultrasound of the lung may be performed immediately prior to the thoracentesis to determine the exact amount and location of the fluid. This is easily performed by rubbing the ultrasound probe over your back while you are sitting and resting your head and arms on a table.

### Pleural fluid analysis

Some of the pleural fluid will be sent to the laboratory and several tests will be performed to help identify possible causes of the pleural effusion.