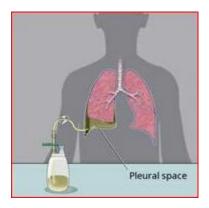
# **Thoracentesis**



A thoracentesis is a procedure to remove excess fluid that has built up in the space between the linings of the chest wall and the lungs (*pleural space*). It is normal to have a small amount of fluid in the pleural space. Some medical conditions, such as heart failure, pneumonia, kidney problems, or cancer, can create too much fluid. This extra fluid is removed using a needle that is inserted through the skin and tissue and into the pleural space.

A thoracentesis may be done to:

- Understand why there is extra fluid in the pleural space and to create a treatment plan that is right for you.
- Help get rid of shortness of breath, discomfort, or pain that is caused by the extra fluid.

## Tell a health care provider about:

- Any allergies you have.
- All medicines you are taking, including vitamins, herbs, eye drops, creams, and over-the-counter medicines. This includes any use of steroids, either by mouth or as a cream.
- Any problems you or family members have had with anesthetic medicines.
- Any blood disorders you have, including any history of blood clots.
- Any surgeries you have had.
- Medical conditions you have, including a frequent cough or coughing episodes.
- Whether you are pregnant or may be pregnant.

#### What are the risks?

Generally, this is a safe procedure. However, problems may occur, including:

- Infection.
- Bleeding.
- Injury to the lung.
- Injury to surrounding tissues or organs.
- Collapse of the lung.

# What happens before the procedure?

• Follow instructions from your health care provider about hydration, which may include:

• Up to 2 hours before the procedure – you may continue to drink clear liquids, such as water, clear fruit juice, black coffee, and plain tea.

#### **Eating and drinking restrictions**

Follow instructions from your health care provider about eating and drinking, which may include:

- 8 hours before the procedure stop eating heavy meals or foods such as meat, fried foods, or fatty foods.
- 6 hours before the procedure stop eating light meals or foods, such as toast or cereal.
- 6 hours before the procedure stop drinking milk or drinks that contain milk.
- 2 hours before the procedure stop drinking clear liquids.

#### **Medicines**

Ask your health care provider about:

- Changing or stopping your regular medicines. This is especially important if you are taking diabetes medicines or blood thinners.
- Taking medicines such as aspirin and ibuprofen. These medicines can thin your blood. **Do not** take these medicines unless your health care provider tells you to take them.
- Taking over-the-counter medicines, vitamins, herbs, and supplements.
- Taking a cough suppressant if you have a frequent cough or coughing episodes.

#### **General instructions**

- You may have a chest X-ray or another imaging test, such as a CT scan or ultrasound, to determine the location and amount of fluid in your pleural space.
- Plan to have someone take you home from the hospital or clinic.
- Plan to have a responsible adult care for you for at least 24 hours after you leave the hospital or clinic. This is important.
- Ask your health care provider what steps will be taken to help prevent infection. These may include:
  - Removing hair at the needle-insertion site.
  - Washing skin with a germ-killing soap.

### What happens during the procedure?

- You will be asked to sit upright and lean slightly forward for the procedure.
- An IV will be inserted into one of your veins.
- You will be given one or both of the following:
  - A medicine to help you relax (*sedative*).
  - A medicine to numb the area (*local anesthetic*).
- The health care provider will insert a needle into your back so that it goes between the ribs and into the pleural space. You may feel pressure or slight pain as the needle is positioned into the pleural space.
- Fluid will be removed from the pleural space through the needle. You may feel pressure as the fluid is removed.
- The health care provider will take the needle out after the excess fluid has been removed. A sample of the fluid may be sent to the lab for testing.
- The needle insertion site (puncture site) will be covered with a bandage (dressing).

The procedure may vary among health care providers and hospitals.

## What happens after the procedure?

- Your blood pressure, heart rate, breathing rate, and blood oxygen level will be monitored until you leave the hospital or clinic.
- A chest X-ray may be done to check the amount of fluid that remains in your pleural space.
- If a sample of fluid was sent for testing, ask your health care provider, or the department that did the procedure, when your results will be ready. It is up to you to get your test results.
- **Do not** drive for 24 hours if you were given a sedative during your procedure.

### **Summary**

- A thoracentesis is a procedure to remove excess fluid that has built up in the space between the linings of the chest wall and the lungs (*pleural space*).
- Some medical conditions, such as heart failure, pneumonia, kidney problems, or cancer, can create too much fluid.
- For the procedure, a needle will be inserted between your ribs and into the pleural space. Fluid will be removed from the pleural space through the needle. The fluid may be sent to a lab for testing.
- After the procedure, you may have a chest X-ray to check the amount of fluid still in your pleural space.

This information is not intended to replace advice given to you by your health care provider. Make sure you discuss any questions you have with your health care provider.

Document Released: 07/03/2006 Document Revised: 11/30/2018 Document Reviewed: 11/12/2018 Elsevier Patient Education © 2020 Elsevier Inc.