



Pericardial Disease

What is the pericardium and how does it work?

The pericardium is a multi-layered membrane that surrounds the heart. The outer fibrous layer protects the heart and the roots of the body's major blood vessel (where they attach to the heart). The outer membrane layer is attached to ligaments that connect the heart to your spinal column, diaphragm, and other parts of your body, thus keeping your heart stable. The inner double layer of the membrane is connected to the heart. The two membrane layers are separated by a fluid layer that allows the heart to move while still being attached to your body.

What is pericarditis?

Pericarditis is an inflammation of the pericardium. Sometimes that increases the amount of fluid between the two layers, this is called pericardial effusion; this extra fluid creates a pressure on the heart that reduces its ability to contract.

What is the source of pericarditis?

Most frequently seen in men between 20-50 years of age, pericarditis can result from

- A viral, bacterial, or fungal infection
- A heart attack
- Cancer that has spread from a nearby tumor
- Radiation treatment for some types of cancer
- Injury to your chest, esophagus (food pipe), or heart
- Use of certain kinds of medicines to suppress your immune system
- Rheumatoid arthritis, lupus, kidney failure, leukemia, HIV, or AIDS.

What are symptoms of pericarditis?

A key symptom for diagnosis is a sharp, stabbing pain in the center or the left side of your chest. (The pain may also be dull in nature.) The pain radiates to your neck or left shoulder and may worsen with heavy breathing. Sitting up or leaning forward may reduce the pain, and lying down may increase it.



Symptoms of pericarditis include

- Fever
- Cough
- Pain when swallowing
- Trouble breathing
- Overall feeling of sickness

How do doctors diagnose pericarditis?

After first reviewing your symptoms and health history, a doctor will use a stethoscope to listen for “rubbing” sounds in your chest, which would indicate fluid around your heart. In more advanced cases, “crackles” may be heard in your lungs due to fluid in the space around the lungs.

Other tests that may be run:

- Chest x-ray may be done to check for heart enlargement caused by increased fluid in the pericardium.
- Electrocardiography (an ECG or EKG) may show the size and function of the chambers of your heart as well as your heartbeat.
- Echocardiography can show the heart wall motion and overall heart size and is one of the best diagnostic tools for indicating fluid on the heart.
- Pericardiocentesis is a procedure in which a needle is used to obtain a sample of the fluid to test for infection.

How do you treat pericarditis?

Fortunately, most cases can be treated by pain relievers and anti-inflammatory medicines. Antibiotics may be needed if an infection is present. Pericardiocentesis may be needed to extract extra fluid that could impede your heart’s capabilities. Surgery is always a last resort. Recovery from pericarditis usually takes about 1 to 3 weeks. However, chronic pericarditis may require several months of treatment.