

Acute Pericarditis Causes

Acute pericarditis is a condition caused by inflammation of the pericardial sac related to various causes. Although some patients may be asymptomatic, typical assessment findings include sharp chest pain, pericardial friction rub, and fever (refer to the Picmonic on "Acute Pericardial Assessment"). Some cases of acute pericarditis are idiopathic while others are related to infection. Trauma, cardiovascular complications, and autoimmune diseases may also lead to acute pericarditis. Additional causes include neoplasms, chest radiation therapy, and renal failure. Refer to the Picmonic on "Acute Pericarditis Interventions" for further information regarding treatment.



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Idiopathic

Idiot-path

The cause of acute pericarditis is often difficult to determine and remains unknown. When the health care professionals are unable to determine the cause of the disease, it is considered idiopathic (unknown).

Infection

Infectious-bacteria

Acute pericarditis may be caused by viral, bacterial, or fungal infections. The most common viral cause of acute pericarditis is the coxsackie A and B viruses. Bacterial infections include those from pneumococcal, staphylococcal, and streptococcal bacteria. Species of Histoplasma and Candida fungi may also cause acute pericarditis.

Trauma

Trauma-spike

Trauma to the chest cavity may trigger acute pericarditis. Examples of trauma include cardiac surgery, pacemaker implantation, and motor vehicle accidents.

Cardiac

Heart

Cardiac-related causes of acute pericarditis include dissecting aortic aneurysm and myocardial infarction. Dressler syndrome is a delayed pericarditis that occurs weeks after a heart attack.

Myocardial Infarction

Mayo-heart Infarction-fart

Myocardial infarction damages underlying heart muscle and may lead to acute pericarditis. The patient with an acute STEMI should be monitored for symptoms of acute pericarditis.

Autoimmune Diseases

Auto-in-moon

Autoimmune diseases such as systemic lupus erythematosus (SLE), may damage cardiac tissue and cause acute pericarditis (refer to the Picmonic on "Systemic Lupus Erythematosus (SLE) Assessment"). Other autoimmune diseases include rheumatoid arthritis and ankylosing spondylitis.

Additionally, autoimmune connective tissue disorders such as polyarteritis nodosa and scleroderma may lead to pericarditis.

Uremia

U-rainbow

Damaged kidneys may be unable to filter out nitrogenous waste products and result in excessive amounts of urea. Uremia associated with renal failure may lead to acute pericarditis. Dialysis treatment may be initiated to filter out waste products from the urine.

Tumor

Tumor-guy

Tumors may cause acute pericarditis. Examples of neoplasms include lung cancer, breast cancer, leukemia, Hodgkin's lymphoma, and non-Hodgkin's lymphoma.

Radiation

Radiation-radio

Since high doses of radiation may damage structures of the heart, chest radiation therapy may result in acute pericarditis.