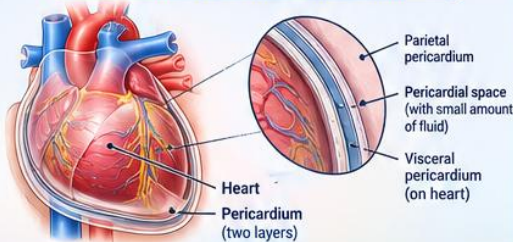




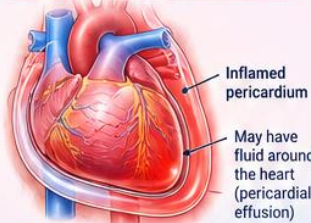
Understanding Pericarditis and Long-Term Management

Pericarditis is inflammation of the pericardium, the thin sac that surrounds the heart. It can cause chest pain, fluid around the heart, and in some cases, recurrent symptoms.

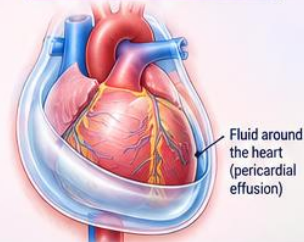
Normal Heart and Pericardium



Pericarditis (Inflamed Pericardium)



Pericardial Effusion



Causes of Pericarditis



Infectious Causes (most common)

- Viral infections
- COVID-19 and other respiratory viruses
- Bacterial infections (rare)
- Tuberculosis (in some regions)



Non-Infectious Causes

- Autoimmune diseases (e.g., lupus, rheumatoid arthritis)
- After heart surgery or procedures
- Following a heart attack (Dressler syndrome)
- Kidney failure (uremic pericarditis)
- Certain medications
- Cancer involving the pericardium



Idiopathic Pericarditis

No clear cause identified (many are presumed viral).

Common Symptoms



Sharp chest pain (often worse with deep breathing)



Pain worse when lying flat



Pain improves when sitting up and leaning forward



Shortness of breath



Fatigue



Fever (sometimes)



Palpitations



Cough, shoulder or neck pain (less common)

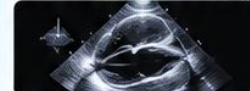
How Is It Diagnosed?

Electrocardiogram (ECG)



- Diffuse ST-segment elevation
- PR-segment depression
- Changes evolve over time

Echocardiogram (Ultrasound)



- Evaluates for fluid around the heart
- Assesses heart function
- Looks for signs of cardiac tamponade

Laboratory Testing

- Elevated CRP (inflammation)
- Elevated ESR
- Elevated white blood cell count
- Troponin elevation if heart muscle is involved (myopericarditis)

Cardiac MRI

- Confirms inflammation
- Useful in recurrent cases
- Evaluates myopericarditis

Potential Complications



Pericardial Effusion

Fluid accumulates around the heart.



Cardiac Tamponade (medical emergency)

Fluid compresses the heart and impairs cardiac output.



Symptoms may include:

- Severe shortness of breath
- Dizziness
- Low blood pressure
- Rapid heart rate



Recurrent Pericarditis

Occurs in approximately 15–30% of patients after an initial episode.



Constrictive Pericarditis

Rare but serious chronic scarring and thickening of the pericardium that restricts heart filling.

Treatment



NSAIDs (First-Line Therapy)

- Examples: ibuprofen, aspirin
- Reduce inflammation
- Relieve chest pain



Colchicine

- Reduces symptoms
- Significantly lowers recurrence rates
- Often prescribed for 3–6 months



Corticosteroids

- Example: prednisone
- Generally reserved for autoimmune disease, NSAID intolerance, or refractory cases

Treatment of Recurrent Pericarditis



- Extended colchicine therapy
- Low-dose corticosteroids
- Immunosuppressive medications
- Biologic therapies (e.g., anakinra, rilonacept)
- Treatment guided by a cardiologist or specialist

Exercise and Activity Recommendations



During Active Pericarditis

- Avoid competitive sports
- Avoid intense exercise
- Avoid heavy weightlifting



Return to Exercise

- Usually considered when:
- Symptoms have resolved
 - Inflammatory markers (CRP) are normal
 - Echocardiogram is stable
 - No myocardial involvement



Athletes

Athletes generally require complete symptom resolution, normal cardiac testing, and clearance by a cardiologist before returning to competition.

Long-Term Follow-Up



Low-Risk Patients

- Usually recover completely
- Limited follow-up after symptom resolution



Higher-Risk Patients

- Recurrent episodes
- Large pericardial effusions
- Myopericarditis
- Autoimmune disease
- Constrictive physiology



Follow-up may include:

- Serial echocardiograms
- ECGs
- Inflammatory markers (CRP, ESR)
- Cardiac MRI when indicated

When to Seek Immediate Medical Attention



- Severe chest pain
- Fainting
- Low blood pressure
- Rapid worsening shortness of breath
- New swelling of the legs or abdomen
- Symptoms suggestive of cardiac tamponade



Prognosis

- Generally excellent and most patients recover fully.
- Recurrences can occur but are usually manageable.
- Constrictive pericarditis is uncommon.
- Long-term survival is excellent when complications are recognized and treated appropriately.



Key Takeaways

- ✓ Pericarditis is inflammation of the sac surrounding the heart.
- ✓ Chest pain that improves when sitting forward is classic.
- ✓ Echocardiography is essential to evaluate for fluid around the heart.
- ✓ NSAIDs and colchicine are the cornerstone of treatment.
- ✓ Exercise restriction is important during active inflammation.
- ✓ Most patients recover completely, although some experience recurrent episodes.



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