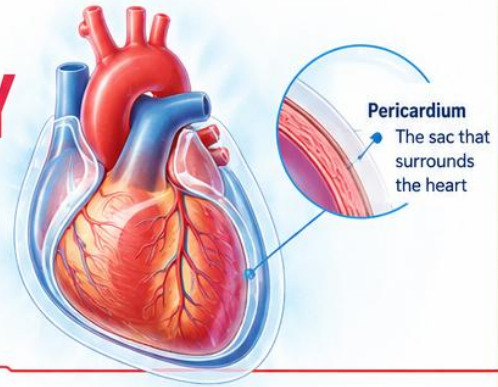


UNDERSTANDING POSTPERICARDIOTOMY SYNDROME (PPS)

Postpericardiotomy Syndrome (PPS) is an inflammatory condition that can occur after heart surgery involving the pericardium (the sac surrounding the heart). It is thought to result from an autoimmune or inflammatory reaction triggered by surgical injury to the pericardium.



WHEN DOES IT OCCUR?

- Usually develops days to weeks after cardiac surgery
- Most commonly within the first 1–6 weeks
- Can occasionally occur months later

DIAGNOSTIC FINDINGS



Echocardiogram

- Pericardial effusion (fluid around the heart)
- Occasionally signs of cardiac tamponade



Chest X-Ray

- Enlarged cardiac silhouette (if significant pericardial effusion)
- Pleural effusions



Laboratory Tests

- Elevated ESR
- Elevated CRP
- Elevated white blood cell count

COMMON SYMPTOMS



Fever



Chest pain (often sharp and worse with deep breathing)



Fatigue



Shortness of breath



Persistent irritability in young children



Poor feeding in infants

DIAGNOSTIC CRITERIA

A diagnosis is generally considered when at least two of the following are present:

- 1 Fever without another identifiable cause
- 2 Pericarditic or pleuritic chest pain
- 3 Pericardial friction rub
- 4 New or worsening pericardial effusion
- 5 New or worsening pleural effusion

PHYSICAL FINDINGS



Pericardial friction rub



Pleural friction rub



Decreased breath sounds if pleural effusions are present

RISK FACTORS



Open-heart surgery



Extensive pericardial manipulation



Younger age in some pediatric populations



Previous episodes of PPS

POTENTIAL COMPLICATIONS



Large pericardial effusion



Cardiac tamponade



Large pleural effusions



Recurrent episodes



Rarely, constrictive pericarditis

TREATMENT

MILD CASES



Nonsteroidal anti-inflammatory drugs (NSAIDs)

- Ibuprofen
- Aspirin (selected patients)

MODERATE TO SEVERE CASES



- Colchicine
- Corticosteroids (for refractory cases or when NSAIDs/colchicine are contraindicated)

SIGNIFICANT EFFUSIONS



- Pericardiocentesis (drainage of pericardial fluid)
- Pleural drainage when necessary



PREVENTION

Studies have shown that colchicine can reduce the incidence and recurrence of PPS in selected patients after cardiac surgery.



PROGNOSIS

The prognosis is generally excellent with prompt recognition and treatment. Most patients recover completely, although some may experience recurrent episodes requiring prolonged anti-inflammatory therapy.



KEY POINT FOR FAMILIES

After heart surgery, new fever, chest pain, worsening shortness of breath, or unexplained fatigue should prompt medical evaluation, as these may be signs of postpericardiotomy syndrome rather than infection alone.



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