

# **An Atypical Case of Post-Pericardiotomy Syndrome**

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#### Introduction

- Post-pericardiotomy syndrome (PPCS) occurs secondary to pericardial injury generally post-cardiac procedure (valve replacement, PCI, PPM, RF ablation)
- Occurs in a large percentage of patients (10-40%) who have undergone cardiothoracic surgery
- Frequently underdiagnosed because it is a clinical diagnosis which typically presents after patient discharge
- Contributes significantly to post-op morbidity, prolonged hospital stays, readmissions
- Presents with fever, pleuritic chest pain, pericardial rub, elevated c-reactive protein (CRP) and pericardial/pleural effusions.

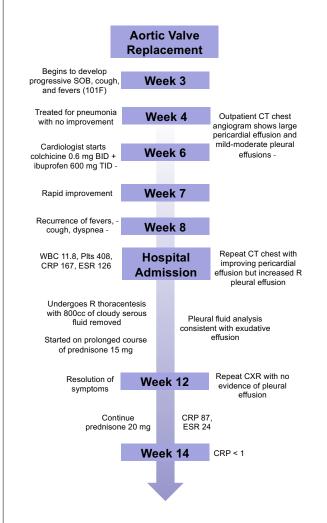
### **Background**

- Unilateral pleural effusions are reported in a minority of patients with PPCS
- This is an unusual case of PPCS that presented with primarily pulmonary symptoms and a large R pleural effusion which was refractory to initial treatment and ultimately required therapeutic drainage

## **Case Presentation**

A 65-year-old man with a 22-pack-year smoking history, severe aortic stenosis, and recent bioprosthetic aortic valve replacement presented with worsening dyspnea, productive cough, fever, and night sweats.

#### **Clinical Course**











### **Conclusions**

- o Post-cardiac injury syndrome:
  - o PPCS
  - Post-MI syndrome (Dresser syndrome)
  - o Post-traumatic pericarditis
- Characterized by pericarditis pleuritic chest pain in >80% of patients
- Exudative pleural effusions observed in PPCS, but 85% are small and left-sided
- A unique case of PPCS in a patient who presented without chest pain and was found to have a predominantly large right-sided pleural effusion refractory to first-line treatment
- Diagnosis was complicated by a clinical picture suspicious for pneumonia versus malignancy
- Symptomatic improvement in this case was ultimately achieved with systemic glucocorticoid therapy and therapeutic thoracentesis

### References

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#### Aortic Valve -Replacement

Begins to develop progressive SOB, cough, and fevers (101F)

Week 3

Treated for pneumonia with no improvement -

Week 4

Cardiologist starts colchicine 0.6 mg BID + ibuprofen 600 mg TID -

Week 6

Outpatient CT chest angiogram shows large pericardial effusion and mild-moderate pleural effusions -

Rapid improvement

Week 7

Recurrence of fevers, cough, dyspnea -

Week 8

WBC 11.8, Plts 408, CRP 167, ESR 126

Hospital Admission

Repeat CT chest with improving pericardial effusion but increased R pleural effusion

Undergoes R thoracentesis with 800cc of cloudy serous fluid removed

Pleural fluid analysis consistent with exudative effusion

Started on prolonged course of prednisone 15 mg -

Resolution of symptoms

Week 12

Repeat CXR with no evidence of pleural effusion

Continue prednisone 20 mg

CRP 87, ESR 24

Week 14 -

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> Week 14 CRP < 1