Acute pericarditis is a common cause of acute chest pain. Most cases are idiopathic or of presumed viral etiology and typically have a relatively benign clinical course.

Respiratory infections caused by *Staphylococcus aureus* can be aggressive, and in the pre-antibiotic era were more often associated with severe supplicative complications such as purulent pericarditis.

This case of a patient with acute myopericarditis and MRSA pneumonia complicated by empyema serves as a reminder of the possibility of bacterial pericarditis in patients with pneumonia.

**Introduction**

- History: A 56 year-old man presented to the emergency department with severe “stabbing” pleuritic chest pain and dyspnea in the setting of 6 days of productive cough and myalgias.
- Vitals: T 101.1 F, P 99, R 17, BP 101/69 mm Hg, SpO2 97% on room air.
- Physical Exam: notable for a faint pericardial friction rub and diminished lung sounds on the left. Pulsus paradoxus was < 10 mm Hg.
- Labs: WBC count 24,300/µL with 83% neutrophils and 6% bands, troponin T of 0.36 (reference range 0 – 0.04).
- ECG: diffuse ST segment elevations (see figure).
- CXR: LUL collapse, LLL consolidation, L pleural effusion (see figure).
- Echocardiogram: focal wall motion abnormalities not concordant with ECG changes, absent pericardial effusion
- Thoracentesis: consistent with an exudative effusion, multiple GPCs on gram-stain
- Blood Cultures: negative
- Sputum & Pleural Fluid Cultures: positive for MRSA

**Clinical Course**

- The patient was started on colchicine, ibuprofen, vancomycin, and ceftriaxone. A chest tube was placed, and the patient showed clinical improvement by hospital day 3.
- There was one episode of atrial fibrillation with conversion to normal sinus rhythm after IV metoprolol.
- Complete resolution of symptoms occurred after several weeks of treatment with IV and oral antibiotics, and there was no pericardial effusion on a follow-up echocardiogram.

**Discussion**

- Though an unrecognized viral infection may have preceded the pneumonia and precipitated the patient’s myopericarditis, this case is also a reminder of the ominous possibility that myopericarditis may itself be a complication of bacterial respiratory infections.
- Further evaluation for bacterial pericarditis with pericardiocentesis may have been warranted had an effusion been present with failure to improve on empiric treatment.
- Pericardial effusions have previously been observed in association with parapneumonic effusions, and in this setting have been described as “sympathetic” pericardial effusions. This case suggests the possibility of “sympathetic” myopericarditis given the highly inflammatory process adjacent to the pericardium.
- The occurrence of atrial fibrillation in this case highlights the need for close monitoring during initial therapy of patients with pericarditis and myocardial involvement.

**References**