

A Case of Myopericarditis in a Patient with Methicillin-resistant *Staphylococcus aureus* Community-acquired Pneumonia

Dear Editor,

We described a healthy and physically active 41-year-old man who presented to a private practitioner with right axillary pain and fever. Physical examination revealed a right axillary fluctuant lump consistent with an abscess that was subsequently drained. He was also prescribed a course of amoxicillin/clavulanate. However, he continued to be febrile and developed persistent right-sided pleuritic chest pain for the next 3 days. On presentation to the Emergency Department, he was hypotensive with a blood pressure of 80/48 mmHg, heart rate of 113/min, and had chills and rigors. Coarse crackles and bronchial breath sounds were heard over the right lung base which was dull to percussion. Clinically this young man was in septic shock.

Chest radiograph confirmed a consolidation in the right lower lobe and an enlarged heart shadow (Panel A). Electrocardiogram (ECG) (Panel B) showed generalised saddle shaped ST segment elevations in the precordial and limb leads with PR segment depression, consistent with

pericarditis. The cardiac enzymes were elevated (CKMB 30 ug/L, Troponin T 0.55 ug/L) indicating myocyte injury. The white cell count was $36.9 \times 10^9/L$. Echocardiogram showed marked left ventricular chamber dilatation, severely impaired left ventricular systolic dysfunction of 20% with global hypokinesia (Panel C). There was no pericardial fluid seen. A diagnosis of severe community-acquired pneumonia with resultant myopericarditis was made. He responded to aggressive fluid resuscitation and intravenous broad-spectrum antibiotics. The microbiology yielded methicillin-resistant *Staphylococcus aureus* (MRSA). Further screening tests for mycobacteria and human immunodeficiency virus (HIV) were negative.

Infective myocarditis is overwhelmingly reported to be viral in aetiology, with bacterial causes rarely described in literature. In one study of 30 cases of acute myocarditis between 1989 and 1993, there was only 1 case of bacterial myocarditis. The rest were of viral or unknown causes. Between 1994 and 1998, amongst another 24 patients with

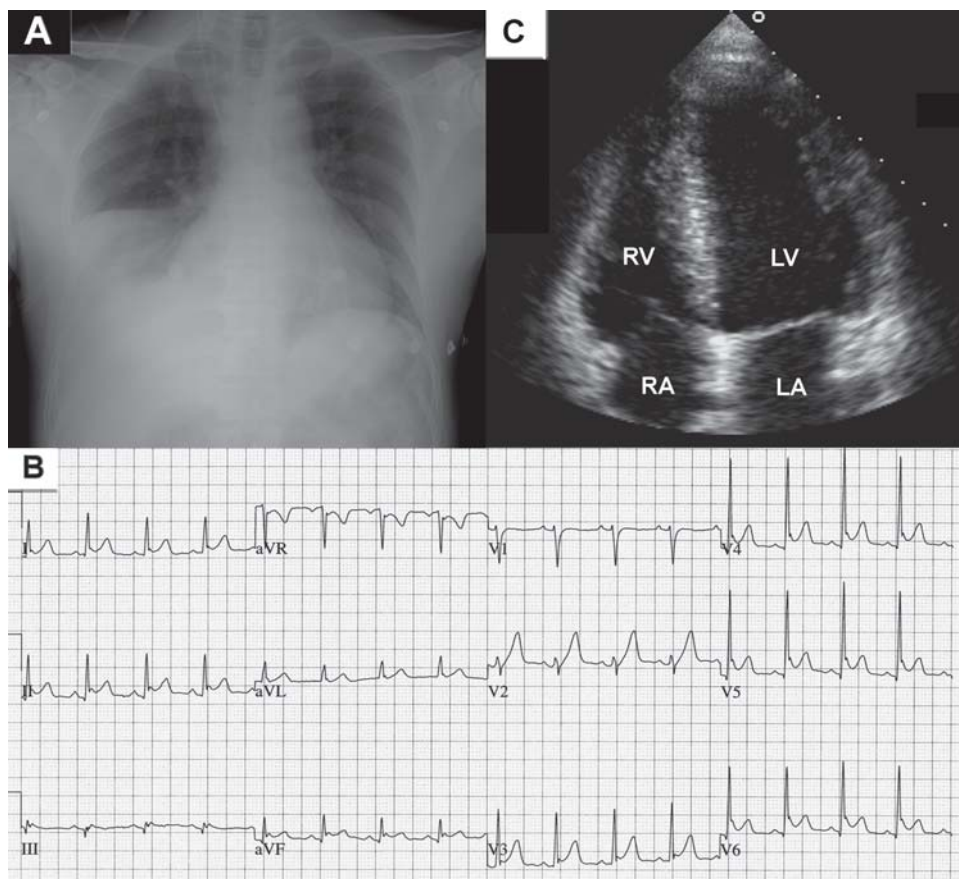


Fig. 1. Presenting chest X-ray (A) showing right lower lobe consolidation and cardiomegaly. Electrocardiogram (B) showing saddle shaped ST segment elevations in the precordial and limb leads with PR segment depression, consistent with pericarditis. Echocardiogram (C) showing marked left ventricular dilatation in end-systole, global hypokinesia and severely impaired ventricular function. LA indicates left atrium, LV left ventricle, RA right atrium and RV right ventricle.

acute myocarditis, only 2 were bacterial in origin. One case occurred after *Haemophilus influenzae* pneumonia and the other after *Campylobacter enteritis*. The rest of the myocarditis was due to Lyme's disease, *Toxoplasma gondii*, HIV, Epstein-Barr virus or of unknown aetiology.¹ Bacterial myocarditis/pericarditis occur mostly in association with a pneumonia or enteritis with *Mycoplasma*^{2,3} and *Campylobacter*^{4,5} being the commoner causes. Acute non-rheumatic myopericarditis caused by Group A haemolytic streptococcus has also been described in isolated reports,⁶ as is tuberculosis.⁷

Our case therefore highlights the importance of increased alertness to the diagnosis of myopericarditis even though the association with bacterial pulmonary infections is uncommon.

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