

P842**The sword in the heart**

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Introduction: Needle embolism is a rare complication of intravenous drug abuse which has only been reported on a handful of occasions. Potential sequelae include cardiac perforation, tamponade, infective endocarditis and recurrent pericarditis. We report the case of a young intravenous opiate abuser.

Case Report:

A 23-year-old heroin addicted man presented to the emergency department because of chest pain ensued six months before; the pain was sharp, was relieved by sitting up and leaning forward and increased with coughing, swallowing, deep breathing or lying flat. He complained also fatigue and fever since one month before presentation.

Echocardiography revealed non haemodynamic pericardial effusion and pleural effusion, treated with pleural drainage. Three haemocultures were negative. Cardiac biomarkers were negative. HIV, HBV and HCV serology was negative. He was treated with coxib and ibuprofen and empiric antibiotic therapy with initial improvement of symptoms and rapid recurrence of them. After a few weeks an ECG showed wide-spread concave ST segment elevation and an echocardiogram revealed pericardial effusion relapse.

A chest radiograph showed a needle near the right ventricle. The patient underwent computed tomography angiography that was able to localize a needle inside the pericardium. A second echocardiogram confirmed the presence of the fragment in the pericardial cavity, beside the right ventricle.

The patient underwent minithoracotomy surgical removal of the needle fragment and of 500 cc of haematic pericardial fluid.

Discussion and conclusions:

The presence of a foreign body in the heart may result from either a direct injury to the heart such as a gunshot injury or from some other embolization to the heart from distal penetration sites (eg, the migration of a catheter or a needle fragment from a peripheral vessel). It may cause fever, recurrent pericarditis and arrhythmia. Surgical extraction in the therapy of choice.

Abstract P842 Figure.

