

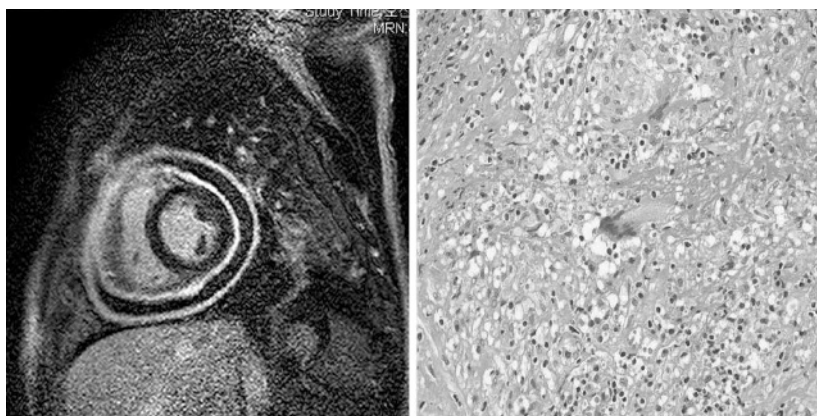
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IMAGES IN CARDIOLOGY

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Delayed hyperenhancement of the pericardium by magnetic resonance imaging as a marker of pericardial inflammation in a patient with tuberculous effusive constrictive pericarditis

A 37 year old man was evaluated for progressively worsening exertional dyspnoea and abdominal distension. On physical examination, the jugular vein was distended and the liver was enlarged. An ECG showed sinus tachycardia with low voltage QRS. Echocardiography showed a large amount of pericardial effusion without significant haemodynamic compromise. However, abnormal septal motion (septal bouncing) was noted, suspicious of constrictive physiology. Closed pericardiostomy with biopsy was performed. After pericardiostomy with drainage, echocardiographic features of constrictive physiology persisted and thus verified the presence of effusive constrictive pericarditis. Contrast enhanced image obtained by magnetic resonance imaging showed prominent delayed hyperenhancement localised at the visceral and parietal pericardium (left panel). Pathology showed severe inflammation with granuloma and caseous necrosis consistent with tuberculosis (AFB stain: positive) (right panel). This case shows that a non-invasive imaging modality—contrast enhanced magnetic resonance imaging—may be useful for the assessment of pericardial inflammation.



Left: Contrast enhanced image obtained by magnetic resonance imaging of short axis view showed prominent delayed hyperenhancement localised at the visceral and parietal pericardium. Right: Pathology showed severe inflammation with granuloma and caseous necrosis consistent with tuberculosis.

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