

# Cardiac tamponade due to haemorrhagic effusion: an unusual first manifestation of systemic lupus erythematosus

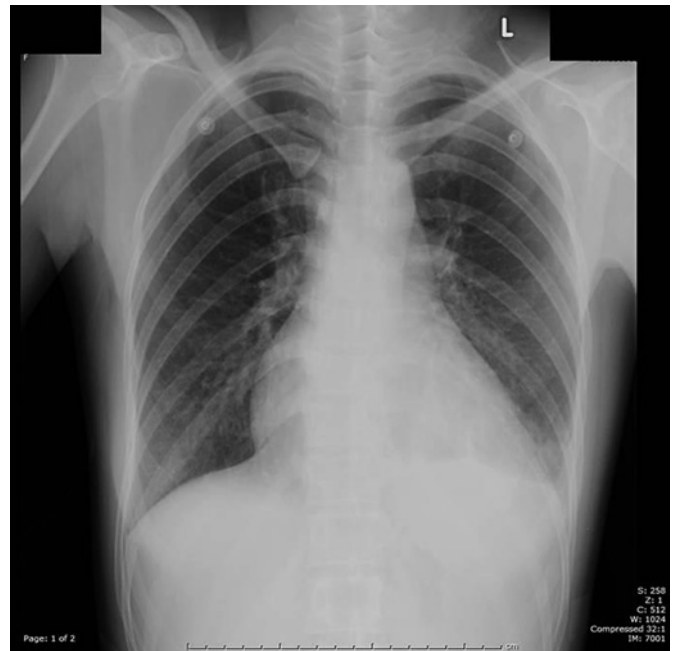
A 31-year-old woman with hypothyroidism on thyroxine replacement presented with a 1-month history of pleuritic chest pain, worsening dyspnoea and fever. She was ill-looking, with a temperature of 38.7°C, blood pressure of 92/50 mmHg and heart rate of 106/min. Cardiac examinations revealed pericardial rub, presence of pulsus paradoxus and elevated jugular venous pressure.

Chest radiograph revealed cardiomegaly (see figure 2). Transthoracic echocardiography showed a large fibrinous pericardial effusion with diastolic collapse of the right atrium and ventricle, consistent with pericardial tamponade (see figure 1). A full blood count revealed leucopaenia and thrombocytopenia.

Pericardiocentesis was urgently performed, leading to immediate haemodynamic improvement. The pericardial fluid was haemorrhagic and negative for malignant cells and micro-organisms, in particular tuberculosis. The presence of highly positive serum antinuclear and anti-DNA antibodies established the diagnosis of systemic lupus erythematosus (SLE).

She was commenced on high-dose methylprednisolone with marked clinical response. She remains well, with no recurrence of pericardial effusion, on oral prednisolone and hydroxy-chloroquine.

Cardiac disease is common among patients with SLE. Up to 55% of patients develop pericardial disease especially clinically



**Figure 2** Chest radiograph showing a globular and enlarged heart.

silent effusion. However, pericardial tamponade is rare, occurring in less than 2% of SLE patients.<sup>1</sup> Haemorrhagic pericarditis is most commonly due to tuberculosis, neoplastic invasion or trauma and rarely severe bacterial infections or bleeding diathesis. Usually, pericardial effusion in SLE is clear or serosanguinous and very rarely haemorrhagic.<sup>2</sup> Despite that, SLE should be considered in a young patient who presents with pericardial tamponade or haemorrhagic pericarditis, as prompt diagnosis and treatment leads to good clinical outcome.

**F Y Chong, M Healy, K H Soon**

**Correspondence to** Dr Fei Yoong Chong; feiyon@yahoo.com

**Competing interests** None.

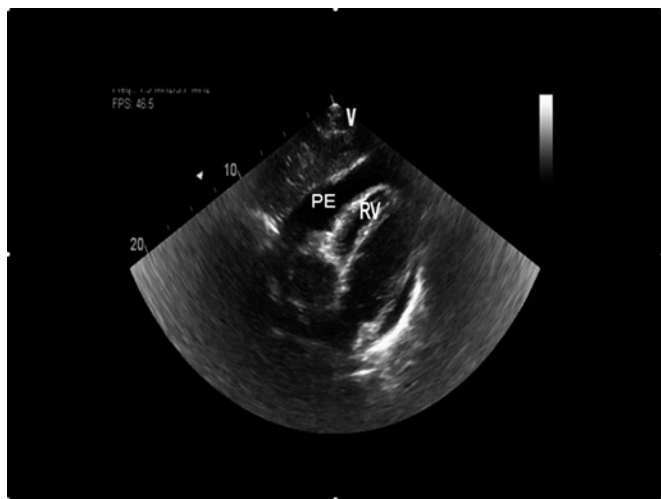
**Patient consent** Obtained.

**Provenance and peer review** Not commissioned; externally peer reviewed.

*Heart Asia* 2010;73. doi:10.1136/ha.2009.001628

## REFERENCES

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**Figure 1** Transthoracic echocardiography (subcostal view) showing massive pericardial effusion (PE) with right ventricular (RV) collapse.