Figure 2 Transoesophageal echocardiogram demonstrating a mass on tricuspid valve

Figure 3 CT scan showing large filling defect (arrow) in left lower lobe artery

COMMENT

In the typical case of infective endocarditis the offending organism is bacterial and affects valves on the left side (mitral or aortic) previously abnormal because of rheumatic disease or congenital defects.¹ Fungal endocarditis, by contrast, is usually right-sided and causes larger vegetations with a greater likelihood of embolization. The ultrasound features of candida endocarditis have been described by Donal and co-workers.² Reviewing 270 published cases of fungal endocarditis (*C. albicans* 24%, non-*albicans Candida* spp. 24%, *Aspergillus* spp. 24%) Ellis *et al.*³ found that the major risk factors were non-cardiac surgery, vascular lines, immunocompromise and injection drug abuse. The second

two may well have contributed in our patient. The aim of surgical treatment is to remove vegetations while conserving the valve, and to extract pulmonary emboli.⁴⁻⁶

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An epigastric swelling

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A cyst that, above the diaphragm, is readily diagnosed can cause puzzlement when it presents in the epigastrium.

CASE HISTORY

A woman aged 52 was referred for assessment of a painless epigastric swelling, 5 × 5 cm, present for eight months. On examination it was non-tender with a doubtful cough impulse. The presumptive diagnosis was a hernia or a lipoma. Ultrasound showed a simple cystic lesion in the subcutaneous plane, appearing extrapericardial and extra-peritoneal. MRI then revealed an extrapericardial cyst, in keeping with a benign lesion such as a ganglion (Figure 1). It was close to the heart but no communication was evident. Ultrasound-guided aspiration then yielded several hundred millilitres of clear colourless fluid, typical of a pericardial

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Figure 1 MRI, sagittal section

cyst. Repeat ultrasound three months later showed no reaccumulation of fluid or recurrence.

COMMENT

The pericardial cyst in this patient was atypical only in its presentation. It was so centrally placed that, instead of going off to the right, it caused a bulge in the epigastrium. These cysts are focal outpouchings of the parietal pericardium, which may or may not communicate with the actual pericardial space. They are lined by a single layer of mesothelial cells; calcification is rare. On aspiration or removal, the contents are clear and colourless; to a thoracic surgeon, the words 'spring water' immediately indicate the diagnosis. Multiple internal loculations occur in approximately 20% of cases.¹

Pericardial cysts are likely to result from congenital persistence of the parietal pericardial recess, due to failure of complete fusion of the mesenchymal coelomic lacunae. Focal weakness of the parietal pericardium with herniation and diverticulum formation, with or without preserved communication with the pericardial space, is another proposed aetiology.²

Most of these are found to arise in the right anterior cardiophrenic angle although they may occur anywhere in the pericardium, posterior cardiophrenic angle or superior retrocardiac pericardial recess.

Plain radiographs may reveal a rounded mass, generally (70%) adjacent to the right heart border. The appearance is non-specific, reflecting the gross anatomic morphology of any unilocular cystic mass. On CT, the walls of the cyst are smooth and thin (or imperceptible) and the content has attenuation equal to that of water. There is no enhancement with intravenous contrast. Owing to their fluid content,

pericardial cysts will be low-intensity on T-1 weighted images MR images and high-intensity on T-2 weighting. Radiologically, differential considerations include bronchogenic cysts, foregut cysts, lymphangiomas and cystic hydatid disease.

Symptomatic pericardial cysts are rare; however, chest pain (22%) and dyspnoea (10%) can result from rapid increase in size, haemorrhage or torsion. In the past, symptomatic cysts were often removed surgically, but image-guided aspiration is now popular.³ When they do not recur after aspiration, a possible reason is that the lesion in the cyst wall remains open, allowing the fluid to recirculate. Percutaneous ethanol induced sclerotherapy has been successful in limited applications.

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***Penicillium marneffei*: a pathogen on our doorstep?**

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Penicillium marneffei, an invasive fungus, has emerged as the third most common opportunistic pathogen among HIV-positive individuals in Southeast Asia. With intercontinental travel commonplace, it needs to be borne in mind by healthcare workers elsewhere.

CASE HISTORY

A man aged 46 was admitted to hospital in the UK after three months of intermittent fever, general malaise, night sweats and chills, chronic productive cough, and weight loss (about 14 kg). He was HIV-positive but not on anti-retroviral drugs. Other medical history included typhoid

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