

Images In...

Direct invasion of the left atrium by a primary lung tumour

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DESCRIPTION

A 47-year-old woman presented with a 1-week history of breathlessness. Clinical examination revealed normal heart sounds, an elevated jugular venous pressure and pitting oedema to the knees. A right-sided transudative pleural effusion was confirmed on chest x-ray (figure 1) and cardiac failure was suspected.

Echocardiography demonstrated normal systolic function, a large mass in the left atrium (LA) and severe pulmonary hypertension (figure 2). The mass appeared to arise from the inter-atrial septum, was smooth surfaced and contained echo-free spaces suggestive of necrotic regions. While it was not clearly pedunculated, a working diagnosis of an atrial myxoma was made and further imaging arranged.

However, overnight our patient deteriorated abruptly becoming hypoxic and hypotensive. A CT scan was

arranged, which revealed a hilar lung tumour directly invading the LA and occupying almost its entire area (figure 3A,B). It was felt that intermittent obstruction of the valve by the mass had been responsible for her deterioration. Biopsies at bronchoscopy established a diagnosis of non-small cell lung carcinoma. Unfortunately our patient became increasingly unwell and died shortly after.

Although the commonest LA tumour is a myxoma, other tumours especially a lung malignancy should be ruled out.¹ Otherwise these patients could be referred for cardiac surgery (myxoma excision) and a major lung pathology missed. Chest x-ray was unhelpful in this case because the mass was obscured by the pleural effusion. CT made the diagnosis, which raises the question should all LA tumours be investigated with CT scans?

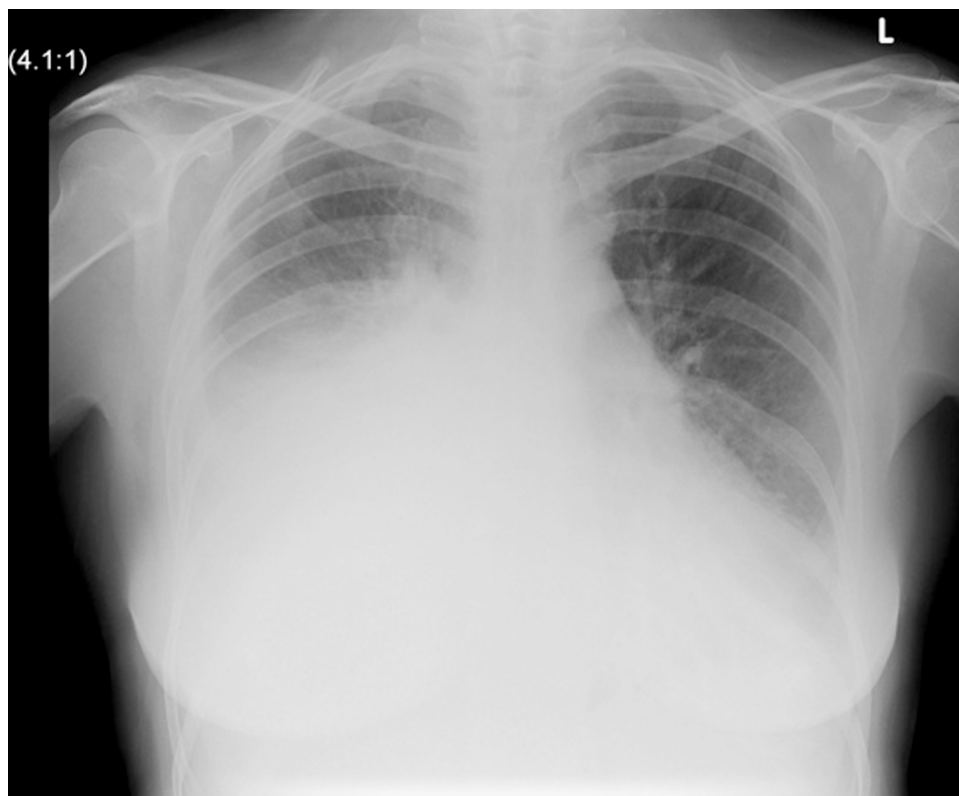


Figure 1 Chest radiograph showing a right-sided pleural effusion.



Figure 2 Echocardiogram, apical four-chamber view showing a large mass within the left atrium.

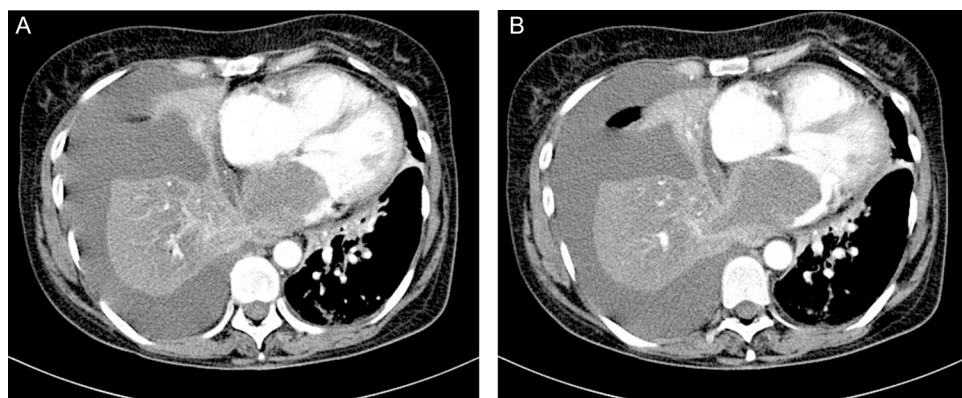


Figure 3 (A, B) CT showing a lung mass in the right hilar region (arrows) infiltrating into the heart and occupying almost the entire left atrium.

Competing interests None.

Patient consent Obtained.

REFERENCES

1. **Kodama** K, Doi O, Tatsuta M. Unusual extension of lung cancer into the left atrium via the pulmonary vein. *Int Surg* 1990;**75**:22–6.

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