Phantom tumour of the lung

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DESCRIPTION

A 74-year-old previously healthy man was referred to our hospital due to dyspnoea on effort lasting for 2 months and paroxysmal nocturnal dyspnoea over the previous month. He had no remarkable medical history and was an ex-smoker (45 pack-years). Vital

signs were normal with a heart rate of 80 bpm, respiratory rate 18 breaths/min, body temperature 36.3°C and oxygen saturation 97% measured at ambient air, but only mild elevation of blood pressure (148/80 mm Hg) was noted. Physical examination showed decreased first heart sound, but

Figure 1 A posteroanterior chest X-ray (A) reveals mild left ventricular dilation with a discrete mass measuring 5 cm and slight thickening of the minor fissure. The lateral view of the chest X-ray (B) showing an oval-shaped shadow located along the major fissure.

Figure 2 Thoracic CT showing a loculated fluid collection (A and B) along the right oblique fissure.

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Figure 3 A posteroanterior chest X-ray (A) seems to be normal, and the lateral view of the chest X-ray (B) reveals slight thickening of the right oblique fissure.

jugular venous dilation or oedema was not present. A posteroanterior chest X-ray (figure 1A) revealed mild left ventricular dilation with a well-delineated round-shaped mass measuring 5 cm and slight thickening of the minor fissure. The lateral view of the chest X-ray (figure 1B) showed an oval-shaped shadow located along the major fissure, but no typical Kerley A, B or C lines were noted. Thoracic CT showed a loculated pleural effusion mainly along the right major fissure (figure 2), and also partially recognised in the minor fissure (figure not shown). Laboratory data were normal, except for marked elevation of serum brain natriuretic peptide (1200 pg/mL). One week later, the pleural effusions had nearly resolved after institution of diuretic therapy (figure 3). Therefore, the patient was diagnosed with ‘vanishing tumor’ (so-called, ‘phantom tumor’) caused by congestive heart failure. Phantom tumours are commonly found within the minor fissure, but can occur in low frequency within the major fissure,^{1 2} as in the present case.

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Learning points

- Congestive heart failure should be considered as a potential cause of vanishing or phantom tumour of the lung.
- Phantom tumours are commonly found within the minor fissure, but can also occur, albeit rarely, in the oblique fissure.
- Lateral views of chest X-ray can assist diagnosis of phantom tumour.