A 61 year old man was admitted with acute breathlessness. A computed tomographic (CT) scan showed a pleural mass 20 cm in diameter occupying the whole right hemithorax and causing massive lung atelectasis, with the exception of a small part of the upper lobe (fig 1A). Magnetic resonance imaging (MRI) showed a right pleural effusion with right hemidiaphragm and liver lowering without infiltration; the superior vena cava was displaced but not infiltrated (fig 1B). A CT-guided transthoracic biopsy specimen was negative so the patient underwent right posterolateral thoracotomy. A vascular peduncle was seen arising from the mediastinal pleura. After ligation and sectioning of the peduncle, the mass was excised without pulmonary resection and the lung gradually re-expanded. Histological examination showed that the mass (24×24×13 cm; weight 3.1 kg) was a malignant fibrohistiocytoma arising from a solitary fibrous tumour. Focal areas of malignant fibrohistiocytoma were observed in the tumour, suggesting modification of the tumour towards malignant fibrohistiocytoma (fig 2A, B). The patient developed hepatic metastases 18 months after surgery and died from disease progression.

Pleural malignant fibrohistiocytoma arising from a solitary fibrous tumour is very rare. We have observed only one case and three other patients have been described in the English literature. It appears to be a slow growing tumour and the high grade histology does not correlate with the clinical presentation. The major prognostic factor seems to be the invasion of adjacent structures at diagnosis.

**Learning points**

- Pleural malignant fibrohistiocytoma arising from a solitary fibrous tumour is very rare.
- Radical tumour resection and strict follow up are the best treatment; the role of adjuvant treatment remains uncertain.

**REFERENCES**
