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NEOPLASTIC PULMONARY EMBOLISM

A 44-year-old woman complained of a tender mass in the right buttock. The mass was excised and found to be a high-grade round cell sarcoma. The surgical margins contained tumour cells so she was referred to our cancer centre for further assessment and treatment. Her complaints were of persistent buttock pain and pleuritic pain in the left side of the chest. On physical examination a residual mass in the right buttock and

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swelling of the right lower extremity were noted. Doppler ultrasonography confirmed a deep venous thrombosis. Magnetic resonance imaging showed a large residual right gluteal mass with intrapelvic extension. Staging computed tomography of the chest showed bilateral lower lobe lesions. The appearance of the lesion on the left was consistent with a pulmonary infarct (Fig. 1), but the appearance of the lesion on the right was nonspecific (Fig. 2).

A multidisciplinary plan, formulated to treat the sarcoma, included induction treatment with ifosfamide-based chemotherapy and radiotherapy before surgical resection. However, the aggressiveness of treatment, especially the surgical aspects, would be influenced by the presence or absence of metastatic disease in distant organs. The patient therefore underwent thoracoscopic wedge resection of the right lower lobe abnormality. Histologic examination of the excised specimen showed pulmonary infarction from an intravascular high-grade round cell sarcoma embolus.

Neoplastic pulmonary embolism is an uncommon and often forgotten cause of pulmonary infarction in cancer patients.^{1,2} Large tumour emboli can cause sudden death, and smaller recurrent emboli can cause pulmonary hypertension and cor pulmonale. Although tumour emboli to the lungs cause pulmonary infarction, they do not necessarily lead to viable pulmonary parenchymal metastases.³ Complete resection of the primary tumour, if possible, will best prevent the occurrence of neoplastic emboli. However, manipulation of the tumour at operation may produce massive tumour embolism and sudden intraoperative death.

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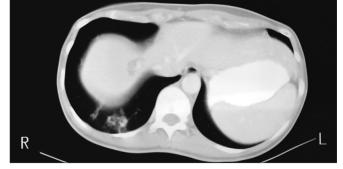


FIG. 1 FIG. 2