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## Pulmonary puzzle

### A large chest wall tumour in an asymptomatic 15-year-old girl

#### CLINICAL PRESENTATION

A 15-year-old girl that had plain chest x ray as part of a routine medical examination was found to have a large left lower chest wall mass associated with rib destruction that was later shown to be painless and non-palpable (fig 1A). Chest CT revealed a 7×11 cm pleura based mass located in the left lower thorax and featured multiple rib destruction and downward depression of the left hemidiaphragm (fig 1B).

CT guided biopsy revealed a lesion with clusters of melanin-laden tumour cells. These tumour cells were positive for HMB-45 and S-100 protein immunohistochemically. The cytoplasmic pigments could be bleached by superoxidative agent and were positive by Fontana Masson stain, consistent with melanin pigments in nature. The skin overlying the tumour was intact, and the tumour was impalpable. Thorough skin examination over her whole body by an experienced dermatologist did not reveal any suspicious skin lesion. No other abnormality was demonstrated on whole body image studies.

#### QUESTION

What is the likely diagnosis and how should this be confirmed?

See page 94 for answer

This case is submitted by:

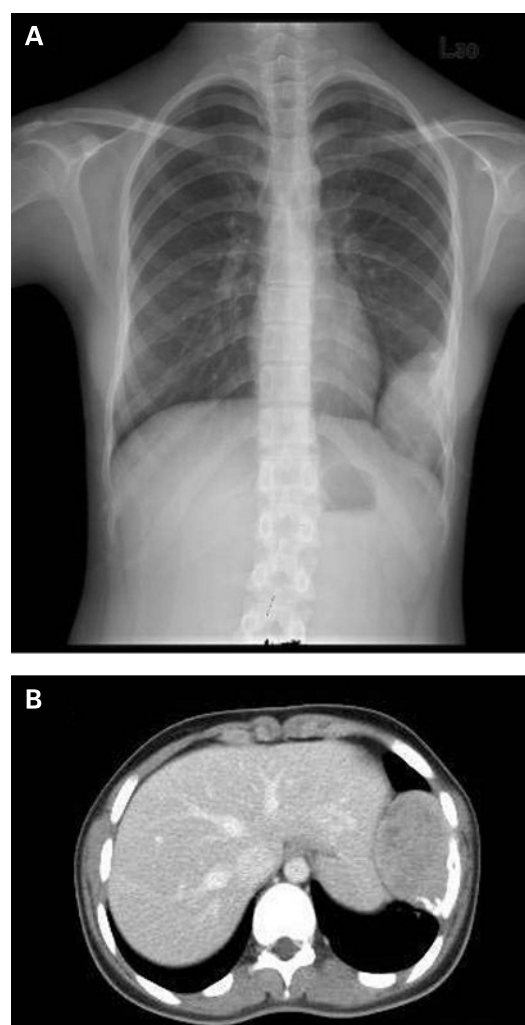
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**Figure 1** (A) Chest plain film revealing a large, well defined left chest wall tumour with obvious rib destruction. (B) Thoracic CT revealing a large expansile tumour associated with osteolytic and sclerotic changes to a number of the patient's ribs.