Clinical image

A Huge Mass in a Boy's Chest: An Unusual Case of Mesenchymal Chondrosarcoma

Enorme masa en el tórax de un niño: caso inusual de condrosarcoma mesenquimal

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Fig. 1. (A) Chest CT showed the heterogeneous mass in the left thoracic cavity. The hyperdense areas are calcification and irregular ossification. Several non-enhanced hypodense areas considered to be necrosis or hemorrhage. (B) Histopathology confirmed the diagnosis of mesenchymal chondrosarcoma (H&E ×200).

A previously healthy 14-year-old boy was admitted to the hospital with a 1-month history of dyspnea and chest pain. A computed tomographic (CT) scan (Fig. 1A) of the chest revealed a mass measuring $16 \times 14 \times 9.8$ cm in the left thoracic cavity. The mass was heterogeneous with hypodense areas, amorphous calcifications and the erosion of the abutting rib.

The patient received the thoracotomy and the mass was removed successfully. It was originated from the left 5th rib. Histopathology diagnosis was mesenchymal chondrosarcoma (Fig. 1B H&E ×200). The patient recovered well after the surgery and refused to receive chemotherapy. He was discharged 14 days after operation.

Mesenchymal chondrosarcoma is a rare malignant tumor originated from bone or soft tissue, which primarily occurred in adolescents and young adults. The biological behavior is malignant and its prognosis is poor. It should be considered when radiologic findings in a young adult are a rapidly growing, heterogeneous mass with hypodense areas and amorphous calcifications. The differential diagnosis for a big thoracic wall mass in a teenager may include other small round blue cell tumors such as primitive neuroectodermal tumor (PNET), Askin tumor and various soft tissue sarcomata with calcification.

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Reference