

Clinical Image

Unexpected Primary Pleural Melanoma Simulating a Chest Wall Tumor

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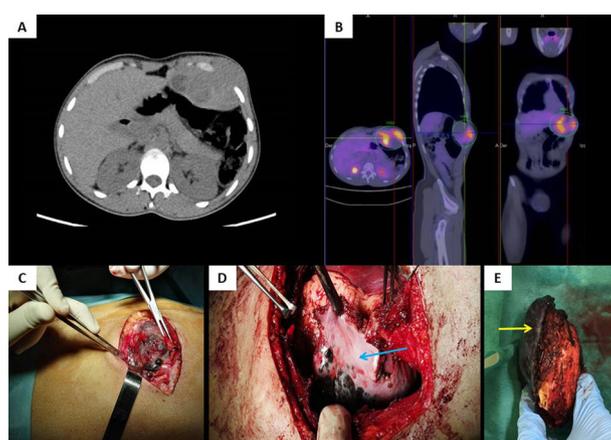


Fig. 1. (A) Chest wall mass displacing abdominal structures in TC. (B) Local hypermetabolic activity in PET. (C) Extra thoracic view of the tumor. (D) Intra thoracic view after the block chest wall resection (blue arrow pointing the opened diaphragm full of black implants). (E) Tumor sample after resection (yellow arrow pointing the parietal pleura side and the primary melanoma).

A 23-years old female with local chest pain and a growing thoracic wall mass with no skin involvement or associated local mole. The body computed tomography (TC) and positron emission tomography (PET) showed a 9 cm tumor depending on the 7th left rib and displacing the lung and the abdominal structures (Fig. 1, A and B), with high uptake activity (SUV 9.5), suggesting chondrosarcoma, osteosarcoma, Edwing sarcoma or soft tissue sarcoma as differential diagnosis entities for malignant primary chest wall tumors. Preoperatively, a tru-cut and a surgical biopsy were taken with no evidence of malignancy in the specimen.

The surgery consisted of a block tumoral chest wall resection including the adjacent ribs, the soft tissue, and the skin (Fig. 1C–E). Once into the thoracic cavity, we surprisingly observed black implants in the mediastinum, the pericardium and local invasion of the diaphragm (Fig. 1D). The histopathology tissue exam (Fig. 1E) confirmed a primary pleural melanoma (hallmarks: HMB45+, MELAN A+ and S100+ and CKAE1/AE3–) with no bone or skin involvement. The patient was discharged 7 days after the surgery. No adjuvant treatment received.

Primary pleural melanoma is a rare entity, being described the first time in 1978.¹ There are no definitive criteria for diagnosis but the cases described are supported on the pulmonary melanoma criteria by Jensen and Egedorf²: (a) no previous cutaneous tumor, (b) solitary pleural lesion, (c) no melanoma in other location at the time of surgery, and (d) histological confirmation by immunohistochemistry or electron microscopy.

Conflict of interest

There is no conflict of interest on the part of the authors.

References

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