

Clinical Image

A Rare Mass in the Mediastinum

Una masa extraña en el mediastino

Margarida Pimenta Valério ^{a,*}, Rita S. Lopes ^b, Bárbara Ramos ^a

^a Pulmonology Department, Centro Hospitalar e Universitário de Coimbra, Coimbra, Portugal

^b Cardiothoracic Surgery Department, Coimbra Hospital and University Centre, Coimbra, Portugal

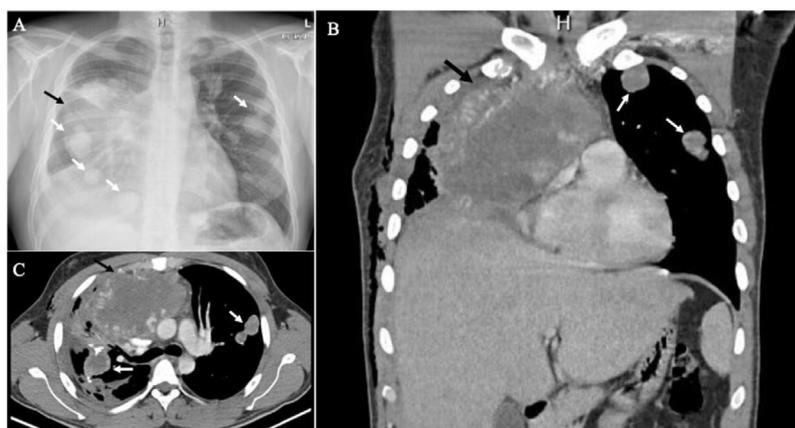


Fig. 1. (A) Thoracic X-ray showing a heterogeneous right-sided mass continuous to the mediastinum (black arrow) and multiple pulmonary well-defined opacities (white arrows); (B) Coronal section on thoracic CT-scan showing a heterogeneous solid mediastinal mass (black arrow), touching the right atrium and diaphragm, and two pulmonary solid nodules on the left lung (white arrows); (C) Axial section on thoracic CT-scan presenting the anterior mediastinal mass (black arrow) contacting the ascending aorta, and left and right pulmonary nodules suggesting various metastasis (white arrows).

A 32-year-old man, previously healthy, presented with chest pain, hypermastia and weight loss. The chest X-ray showed a right-sided mass continuous to the mediastinum and multiple pulmonary well-defined opacities. These findings were confirmed by CT-scan (Fig. 1). Transthoracic needle biopsy was inconclusive. A biopsy from both mediastinal and pulmonary lesions was done by video-assisted thoracoscopic surgery. The immunohistochemical staining was positive for human chorionic gonadotropin (hCG) and CK7. Serum tumor markers documented a high level of serum hCG (>100,000 mU/mL; normal 0–5). A diagnosis of primary mediastinal choriocarcinoma was made based upon immunohistochemical staining and absence of other lesions. Patient started treatment with bleomycin, etoposide and cisplatin.

Choriocarcinoma is a very rare neoplasm. There are two forms: gestational and non-gestational. Non-gestational choriocarcinomas can form in males usually between ages 20 and 30, in the gonads or midline structures with pluripotent germ cells.¹ It usually presents with atypical symptoms, multiple metastases in early stages, poor response to therapy and decreased survival.² Increased serum levels of hCG are associated with worse prognosis.^{1,2} Diagnosis requires histological and immunohistochemical analysis of the tumor.² This case highlights the relevance of keeping primary choriocarcinoma in the differential diagnosis of mediastinum tumors.

Conflict of interest

None.

References

* Corresponding author.

E-mail address: mvalerio@campus.ul.pt (M. Pimenta Valério).

1. Bishop BN, Edemekong PF. Choriocarcinoma. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2020. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK535434/> [updated 14.07.20].
2. Zhang S, Gao H, Wang XA, Liang B, Li DW, Shao Y, et al. Primary choriocarcinoma in mediastinum with multiple lung metastases in a male patient: a case report and a review of the literature. Thorac Cancer. 2014;5:463–7, <http://dx.doi.org/10.1111/1759-7714.12120>.