



Clinical Image

Mediastinal Müllerian cyst: The importance of an immunohistochemical study[☆]



Quiste mediastínico de origen mülleriano: importancia del estudio inmunohistoquímico

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We report the case of a 48-year-old woman with a long-standing history of irritative cough and problems swallowing, in whom a computed tomography scan showed an incidental of a retro-tracheal and right paraesophageal cystic mass measuring 2.5 cm, which shifted the esophagus slightly to the left, consistent with bronchogenic cyst, schwannoma, or esophageal duplication cyst. It was excised using right single-port video-assisted thoracic surgery (VATS). Histology study revealed several cystic formations covered by a flattened, cuboidal and cylindrical ciliated epithelium over a fibrous stroma, that showed immunohistochemical positivity for estrogen receptors (ER), progesterone receptors (PR), and Wilms tumor protein (WT1) (Fig. 1).

The presence of a cyst of Müllerian origin in the posterior mediastinum was first described by Hattori in 2005, but their origin is still unknown and these are rare lesions with few described cases¹. They usually occur in perimenopausal women and have been associated with obesity, gynecological history, and hormone replacement therapy. They follow a benign course without recurrence. Müllerian cyst or Hattori cyst should be included in the differential diagnosis of posterior mediastinal cysts, and histologic and immunohistochemical studies are essential for diagnosis, since they can easily be confused with bronchogenic cysts².

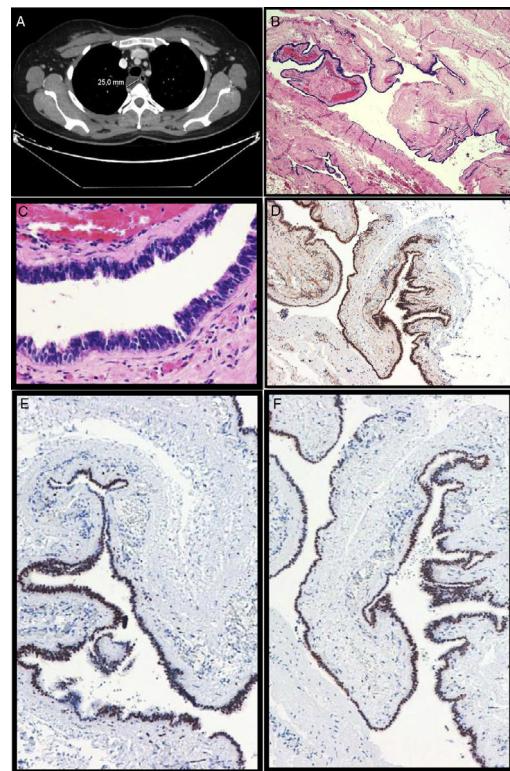


Fig. 1. A) Computd axial tomography showing a cystic lesion measuring 2.5 cm located in the posterior mediastinum. B) Cystic formation of thin walls on a fibrous stroma coated with a single layer of epithelial cells. C) Detail of the non-stratified ciliated cylindrical epithelium covering the cyst (H&E; B: $\times 40$, C: $\times 400$). D) Coating epithelium shows positive immunostaining for WT1, progesterone receptors (E) and estrogen receptors (F) (D-F: $\times 100$).

References

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- Thomas-de-Montpréville V, Dulmet E. Cysts of the posterior mediastinum showing mullerian differentiation (Hattori's cysts). *Ann Diagn Pathol.* 2007;6:417–20.

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