

Clinical Image

Pulmonary Metastasis of Cribriform-Morular Variant of Thyroid Carcinoma

Metástasis pulmonar de la variante cribiforme-morular de carcinoma tiroideo

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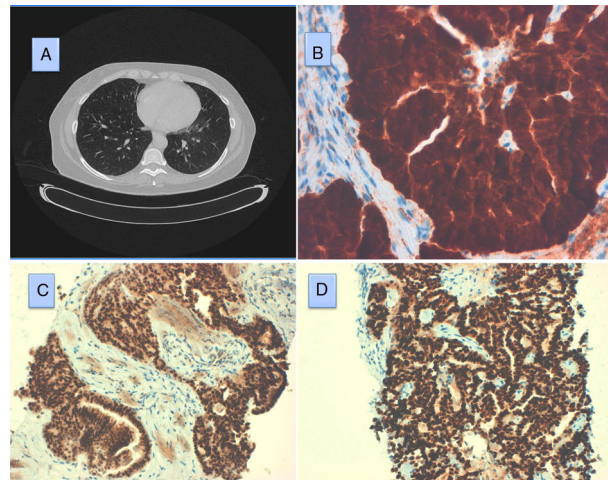


Fig. 1. (A) Thorax computed tomography scan showing bilateral multiple nodules. (B) Tumor cells showing strong, diffuse staining for β -catenin. β -Catenin 400 \times . (C) Diffuse staining of tumor cell nuclei with thyroid transcription factor (TTF-1). TTF-1, 200 \times . (D) Tumor cells showing diffuse, strong staining with progesterone receptors. Progesterone receptor, 200 \times .

Cribriform-morular variant of thyroid carcinoma (CMV-TC) is an uncommon variant of papillary thyroid carcinoma.¹ The immunohistochemical phenotype is thyroid transcription factor (TTF-1+) with focal staining for thyroglobulin, cytokeratin 7 (CK7) and CK19. The hallmark feature, however, is strong staining for β -catenin. CMV-TC metastasizes to the regional lymph nodes in 10% of patients and to distant sites in 6%.² We report a case of sporadic CMV-TC in a 45-year-old woman with regional lymph node metastases and, 7 years after diagnosis, lung metastases. Thoracic CT showed multiple bilateral nodules measuring up to 2 cm in diameter. In 2018, a chest CT scan revealed a significant increase in nodule size and multiple lesions in the left lower lobe (Fig. 1A). The

lesions were positive by PET and a lung core biopsy was performed. The immunohistochemical study showed strong, diffuse positivity for β -catenin, TTF-1, ER and PR (Fig. 1B–D), all characteristic findings in CMV-TC.

References

- Rosai J, Alboreo Saavedra J, Asioli S, et al. Papillary thyroid carcinoma. In: Lloyd RV, Osamura RY, Klöppel G, et al., editors. World Health Organization Classification of Tumors. Pathology and genetics of tumours of endocrine organs. 4th ed. Lyon: IARC Press; 2017. p. 81–91.
- Cameselle-Teijeiro JM, Peteiro-González D, Caneiro-Gómez J, Sánchez-Ares M, Abdulkader I, Eloy C, et al. Cribriform-morular variant of thyroid carcinoma: a neoplasm with distinctive phenotype associated with the activation of the WNT/ β -catenin pathway. *Mod Pathol.* 2018;31:1168–79.

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