

## **METASTATIC PULMONARY ADENOCARCINOMA WITH MICROPAPILLARY COMPONENT IN THYROID NODULE**

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**Background/Purpose:** The thyroid is a rare site of metastasis despite its rich irrigation, they represent 2-3% of all thyroid malignancies. We report the case of a man with no history of smoking, that presented with a multinodular goiter, multiple pulmonary nodules and secondary bone lesions.

**Methods:** A thyroid fine needle aspiration biopsy and lung excisional biopsy were performed and reported as: papillary oncocytic carcinoma and adenocarcinoma of the lung with micropapillary component, respectively. Given the former diagnosis a total thyroidectomy was performed and showed multiple hyperplastic nodules, one of them with a foci of micropapillary structures. Both lesions were studied synchronously with histochemical and immunohistochemical markers. A sample from the lung lesion was sent to molecular biology research.

**Results:** Both lesions were positive for surfactant apoprotein (A and B), mucicarmin stain and negative for HBME-1 and thyroglobulin. The lung sample, had the deletion of exon 19 of Epidermal Growth Factor Receptor (EGFR).

**Discussion & Conclusion:** We showed that the thyroid lesion corresponded to a metastatic adenocarcinoma with micropapillary component of primary pulmonary origin. It is not uncommon that the study of two synchronous tumors with the same histological pattern becomes challenge for the pathologist. Is essential the use of histochemical, immunohistochemical and sometimes molecular biology markers, become essential for a correct diagnosis because the clinical, therapeutic and outcome implications for the patient.