Coincidence of Hürtle cell carcinoma and non invasive follicular neopasm with papillary-like nuclear features (NIFTP) of the thyroid: A Case Report

Authors
Kreze A1*, Koskubová D1, Tresnerová K1, Koutníková H2, Podlešák T3, Špůrková Z2
1Internal Department Hospital Bulovka, Prague, Czech republic
2Department of Pathology Hospital Bulovka, Prague, Czech republic
3Department of Otorhinolaryngology Hospital Bulovka, Prague, Czech republic
*Corresponding Author

Introduction
Collision tumours are defined as geographically coexistent but histologically distinct and morphologically independent neoplasms (Brandwein-Gensler et al.). We report a combination of Hürtle cell carcinoma and NIFTP. Thus, we add this combination to the group of collision tumours in the thyroid.

Case history
69-year-old female presented with a growing mass on right side of neck.
Ultrasound thyroid gland was: right lobe 7.2 ml, left lobe 2.3 ml, hypoechoic nodus 18x19x23 mm with microcalcifications and higher vascular flow in right lobe. Laboratory status: euthyrosis (TSH 1.31 mU/l. FT4 15.9 pmol/l). Fine needle aspiration cytology of nodus showed the result: Bethesda III (oncocytic lesion of uncertain malignant potential). We recommend right-sided lobectomy with perioperative histology. Right-sided lobectomy was done.

Definitive histological finding was Hürtle cell carcinoma and NIFTP (Fig.1-4). It was completed by left-side lobectomy and subsequently applied therapeutic NaI*.

Fig 1- Hürtle cell carcinoma and NIFTP in thyroid
Discussion
Bilroth established the first criteria for multiple primary tumours in 1879, simplified by Warren to 3 conditions: each tumour demonstrates a definitive picture of malignancy, each tumour must be distinct and the possibility that one was a metastasis must be excluded (Warren et al.).
There are reports of the coexistence of Hürthle cell carcinoma and the tall cell variant of papillary carcinoma in the same thyroid lobe (Baloch et al.), Hürthle cell carcinoma and follicular carcinoma (Khethmal et al.), and Hürthle cell adenoma with papillary microcarcinoma (Rana et al.).
There is a limited body of information on how these tumours could be managed. Surgical management with appropriate adjunct therapy is recommended. The presence of two primary cancers should be considered as signifying an aggressive potential and also an increased risk of recurrence (Thomas et al.).
In summary, we report a collision tumour compromised of Hürthle cell carcinoma and NIFTP, which has not been reported so far.

References