SYNCHRONOUS OCCURRENCE OF HÜRTHLE CELL PAPILLARY CARCINOMA OF THE THYROID GLAND AND LARYNGEAL CARCINOMA

Uğur PABUÇCUOĞLU*, Fatih KUYUCUOĞLU*, Sülen SARIOĞLU*, Ahmet Ömer İKİZ**, Alpin GÜNERİ**

D.E.U.Head and Neck Cancer Group
D.E.U. Faculty of Medicine, Department of Pathology*
D.E.U. Faculty of Medicine, Department of ENT **

SUMMARY

Hürthle cell papillary carcinoma of the thyroid gland is a rare entity. Moreover the synchronous occurrence of this tumor with laryngeal carcinoma has not been documented in the literature. This paper presents coexistence of these tumors with special emphasis on the occult form of Hürthle cell papillary carcinoma.

Key words: *Occult, thyroid, Hürthle cell, synchronous, laryngeal carcinoma.*

ÖZET

Tiroid bezinin Hürthle hücreli papiller karsinomu çok enderdir. Ayrıca bu tümörün larinks karsinomu ile birlikte bulunması literatürde tanımlanmamıştır. Burada Hürthle hucreli papiller karsinomun okult formuna ozellikle değinilerek bu iki tumörun eş zamanlı bulunduğu bir olgu sunulmuştur.

Anahtar sözcükler: *Okült, tiroid, Hürthle hucre, senkron, laringeal karsinom.*

Hürthle cell papillary carcinoma is a rare tumor of the thyroid gland, which fullfill the histologic criteria for papillary carcinoma, but made up of Hürthle cells. They comprise about 2 to 4% of all papillary carcinomas (1,2). We were unable to find any "occult" carcinoma of this type in the literature. We herein report a case of occult Hürthle cell papillary carcinoma occuring synchronously with a laryngeal squamous cell carcinoma (SCC). To our knowledge, this is the first report of the coexistence of these two malignancies.

CASE REPORT

A 64-year old man who had been a smoker for 40 years presented with a 3 month history of hoarseness. The otorhinolaryngologic examination revealed a mass at left and right ventricular bands, ventricules, sparing the subglottic region with impaired vocal cord mobility on the left side. Neck examination was unremarkable, but routine staging ultrasonography of the neck revealed unechoic nodule of 8 mm diameter at the inferior region of the left thyroid lobe.

After the biopsy diagnosis of laryngeal SCC, the patient was accepted as T2N0M0 clinically and underwent total laryngectomy, left radical neck dissection, trachea-eosophageal puncture and left subtotal thyroidectomy as a routine procedure.

The pathologic examination revealed moderately differentiated SCC of the right and left ventricular bands and left vocal cord, also involving one-fourth lower part of the epiglottis, with 18 reactive lymph nodes of the left radical neck dissection. Extralaryngeal spread with

thyroid cartilage destruction was noted. The diagnosis was moderately differentiated transglottic SCC pT4N0.

Subtotal thyroidectomy specimen revealed follicular nodule of 8 mm diameter at the left inferior region. In addition to this, another 5 mm white-gray solid lesion was observed at macroscopic examination located at the left thyroid parenchyma. This region was not defined by palpation or by ultrasonographic examination. Microscopic examination revealed a well circumscribed but non encapsulated, neoplastic growth of 5 mm diameter. It was made up of Hürthle cells mostly arranged around delicate fibrovascular core in a papillary fashion. Nuclear pleomorphism was noted (Figure 1). Diagnosis was macrofollicular nodule and Hürthle cell papillary carcinoma of the thyroid gland.

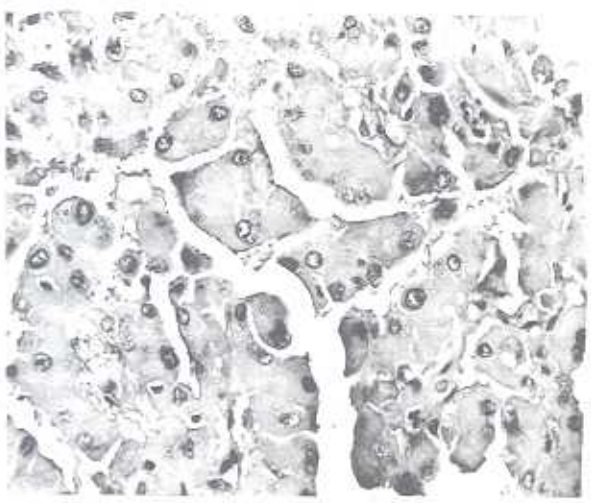

Figure 1: Microphotograph of papillary carcinoma made up of Hürthle cells (H&E x100).

Additional treatment was not performed for the Hürthle cell papillary carcinoma. Patient is disease free 4 years after the initial operation.

DISCUSSION

Hürthle cells , first described by Askanazy, are large polyhedral cells with abundant eosinophylic and granulated cytoplasm and irregular, hyperchromatic nuclei. The so called Hürthle cell tumor of the thyroid gland represents one of the less common neoplasms of this gland. Some authors regard Hürthle cell tumors as a special type of neoplasm, whereas others regard them as morphologic variants of papillary and follicular carcinomas (1). Another important aspect of Hürthle cell tumors is the differantial diagnosis of adenomas and carcinomas. Extracapsular and blood vessel invasion, capsular penetration, DNA patterns and tumoral necrosis are indicative for malignancy (3,4).

There are relatively few case reports of this tumor as compared with numerous other types. Goldenberg (5) reported 22 cases of Hürthle cell carcinoma two of which were papillary. Of the 28 cases examined by Gonzalez-Campora et al (6), only 2 were papillary. Woolner at al. (7) described 8 cases as variants of papillary carcinoma in their series of 32 cases..

The incidence of papillary Hürthle cell tumors among papillary thyroid carcinomas are about 2 to 4% (1,2,3). Among 388 papillary thyroid carcinomas, Beckner et al (2) diagnosed 15 (3.8%) oxypilic papillary carcinomas and all the cases were larger than 1 cm. Although their histopathology is interesting, overall survival of papillary Hürthle cell tumors are not different from classical papillary carcinomas (8).

Malignant thyroid tumors smaller than 1 cm diameter are regarded as small carcinomas. Vickery et al.(9) noted that most of these tumors measure between 4 to 7 mm. Harach et al.(10) suggessted that tumors measuring smaller than 5 mm should be considered as a "normal" finding and should be left untreated. However, documented instances of lymph node metastasis and even extracervical spread of lesions smaller than 0.5 cm are known (11). The size of all the lesions in large series of Hürthle cell papillary thyroid carcinomas were above 1 cm diameter. Our case should be regarded as occult Hürthle cell papillary carcinoma and the first report of this entity. The patient was left untreated and he is well at 4 years after the operation.

Patients with upper aerodigestive tract (UADT) carcinomas are not accepted to have increased risk for thyroid gland malignancy. In the series of Haughey et al. (12) site distribution of 4.623 (11.8%) second primaries in 38.856 head and neck cancer patients excluding thyroid gland were as follows: Head and neck 35% (excluding thyroid tumors), lung 25%, esophagus 9% and other sites 31%. But no association with thyroid carcinoma was noted. Panosetti et al (13) reported 32 (1.6%) synchronous second primaries in a series of 1980 laryngeal carcinomas. Among the second primaries, oral and oropharyngeal cases were the most frequent (40%), followed by lung (12%), esophagus (9.3%) and 8 (25%) of the cases were out of ear nose throat region. Data is not available about the distribution of these 8 cases, but these results suggests at least an incidence less than 0.04% for multiple primaries at larynx and thyroid gland.

Pacheco-Ojeda et al(14) reported 10 multiple primary cancers of thyroid and UADT tract cancers among 11700 UADT and 1120 thyroid gland cancers. Four out of 10 cases (%40) were laryngeal SCCs. Diagnosis of the thyroid gland malignancies were mixed papillary and follicular carcinoma and papillary carcinoma.

To our knowledge there is no published case with occult Hürthle cell papillary carcinoma coexistent with laryngeal SCC.

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