中文題目:原發性甲狀腺鱗狀細胞癌伴有微小乳突細胞癌的罕見案例報告 英文題目: Coexistence of primary squamous cell carcinoma of the thyroid gland and micro-papillary thyroid carcinoma: a case report 作 者: 吳佳潔¹, 楊文萍²

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Introduction:

Thyroid gland lacks squamous epithelium which makes primary squamous cell carcinoma of the thyroid gland (PSCCT) a very rare malignant disease, with an incidence of less than 1% of all thyroid malignancies. Compare to other types of thyroid cancer, it's more aggressive and has a poor prognosis. Rarely, PSCCT occurs in associated with other thyroid disease such as follicular carcinoma, papillary thyroid carcinoma (PTC), anaplastic carcinoma.

We present a case with primary squamous cell carcinoma of the thyroid gland combined with a micro-PTC in a male patient.

Case presentation:

A 75-year-old male presented in February 2021 with dyspnea, dry cough and sore throat. CXR revealed right neck mass with trachea deviation to left. Thyroid echo indicated a 5.52x2.43x5.34cm large mixed echoic mass of right thyroid lobe. Fine-needle aspiration cytology indicated sheets of atypical follicular cells. His thyroid function tests were normal. Computed tomography (CT) of the chest and neck revealed enlargement of the right thyroid lobe and right neck lymphadenopathy.

The patient subsequently underwent total thyroidectomy. However, the right thyroid gland was extremely firm and attached to the surrounded soft tissue that made it difficult to dissect completely from the thyroid bed. Right subtotal thyroidectomy was therefore done. The pathological diagnosis demonstrated PTC and PSCCT. The largest diameter of PTC was less than 1mm and without extra-thyroid extension. Immunohistochemistry of the PSCCT revealed the following findings: p63 (+), p40 (+), CK20 (-), TTF (-), thyroglobulin (-), CK7(-), chromogranin A(-), BRAF(-), with PD-L1 expression in tumor cells over 50%. The results of esophagogastroduodenoscopy and CT of chest and abdomen ruled out the possibility of other primary tumors of squamous cell carcinoma.

Chemotherapy with 5 courses of Cisplatin and radiotherapy to residual thyroid tumor were performed. Follow-up CT of neck revealed regressive change in right thyroid tumor size which from 6.3cm to 4.3cm in greatest diameter. Another 3 courses of chemotherapy with PF (Cisplatin plus 5-FU) regimen were prescribed. After the CCRT treatment, the subsequent clinical course was not progress till now (September 2022).

Discussion:

Thyroid cancer is the most common endocrine malignancy with a 5-year survival rate over 98%. However, PSCCT is a very rare malignant disease because thyroid gland lacks squamous epithelium. It represents an incidence of less than 1% of all thyroid malignancies and it's 3-year death rate is over 80%. Patients usually have a history of goiter and often present with a rapidly growing neck mass followed by symptoms of compression of adjacent neck structures, such as dyspnea and hoarseness. Also, metastases to cervical lymph nodes is common. Surgical resection of tumor in combination with adjuvant radiotherapy and chemotherapy is the most recommended treatment.

In our case, pathology of the thyroid tumor revealed micro-PTC and PSCCT. Although total thyroidectomy is recommended, the patient underwent right subtotal thyroidectomy because of difficult dissection of the thyroid gland. He then received chemotherapy with Cisplatin plus 5-FU as standard chemotherapy for squamous cell carcinoma and radiotherapy to the thyroid residual tumor. Now 8 months after complete CCRT treatment, follow-up computed tomography of neck depicted stationary thyroid mass in size and lymph nodes lesion.

Conclusion:

PSCCT is a very rare malignant disease with poor prognosis. Complete surgical resection of tumor with adjuvant radiotherapy and chemotherapy is the most recommended treatment. Median survival of these patients is around 6 months. We presented a detailed clinicopathological features and treatment history of PSCCT in a 75-year-old man, and he still alive with fair spirit after 18 months after diagnosis.