

Tonsillar metastasis from small cell lung cancer: Rare but occurs

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ABSTRACT

Metastatic carcinoma of the palatine tonsil is extremely rare in the literature. We report herein a case with unilateral tonsillar metastasis of small cell lung carcinoma which may mimic tonsillolithiasis, with a review of the literature about this rare entity. [Turk J Cancer 2009;39(1):28-30]

KEY WORDS: Small cell lung cancer, tonsillar metastasis

INTRODUCTION

Small cell lung carcinoma is a highly malignant neoplasm, represents approximately 15% of all bronchial carcinomas. Small cell lung carcinoma is renowned for its propensity to disseminate widely throughout the body at an early stage in its clinical course (1). The main metastatic sites of SCLC are liver, brain and adrenal glands, but it can metastasize to many other organs. The palatine tonsil is a rare site to find metastatic cancer deposits. The relatively most common cancers metastasizing to tonsils are renal cell carcinoma, cutaneous melanoma, non-small cell lung cancer and breast cancer. Tonsillar metastasis from small cell lung carcinoma is extremely rare, and clinically apparent cases are even less common (2). We present a case with unilateral tonsillar mass who had a history of small cell lung carcinoma.

CASE REPORT

A 63-year old male patient who had a history of extensive stage small cell lung carcinoma was admitted to our clinic complaining of dysphagia and swallowing pain, with a foreign-like body sensation. He had the diagnosis of extensive stage small cell lung carcinoma one year ago and he received 6 cycles of chemotherapy consisting of cisplatin plus etoposide and also palliative irradiation for chest. After the regression of lung lesions with those

therapies, the patient was followed monthly. At the sixth month examination, there was a white hard object in 2 cm diameter within the right tonsillar crypt (Figure 1 A, B). The lesion seemed as a tonsillolith or as a peritonsillar abscess. The lesion was excised under local anesthesia by otorhinolaryngology department. Histopathological examination confirmed the diagnosis of a metastasis of small cell carcinoma (Figure 2). Microscopic examination of the tumor revealed small round malignant cells forming nesting trabeculae and rosette-like structure, with extensive necrosis. The morphologic picture was interpreted as a neuroendocrine tumor (Figure 2 A&B). Immunohistochemical staining demonstrated diffuse strong positive reaction with pancytokeratin and synaptophysin in tumor cells (Figure 2C). Subsequently, thoracoabdominal computerized tomography (CT) scan was performed to detect the other metastatic lesions. There was no pathological

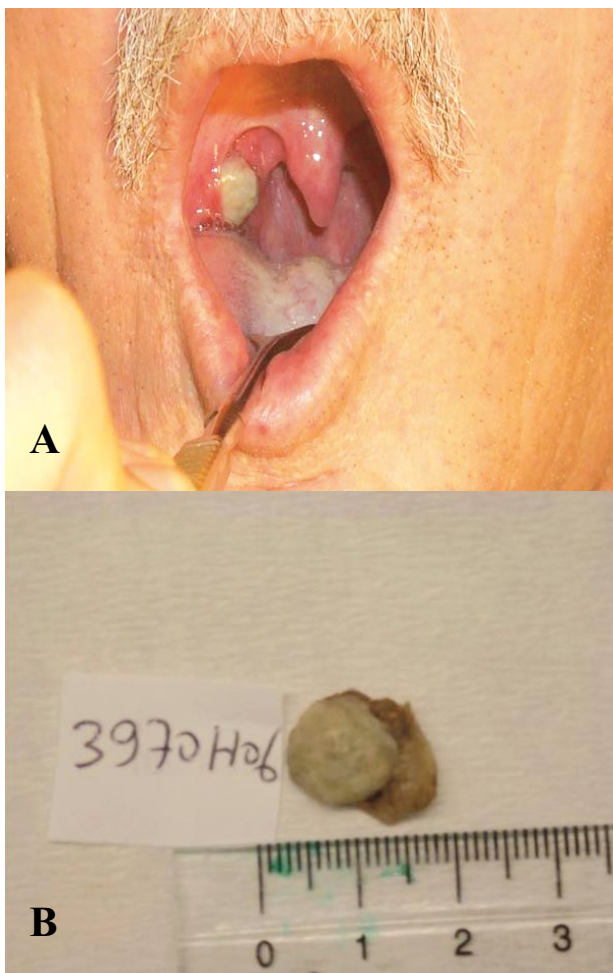


Fig 1(A&B). (A): Tumor deposit arising from the right tonsil mimic the tonsillolith, (B): Macroscopic appearance of tonsillar metastasis

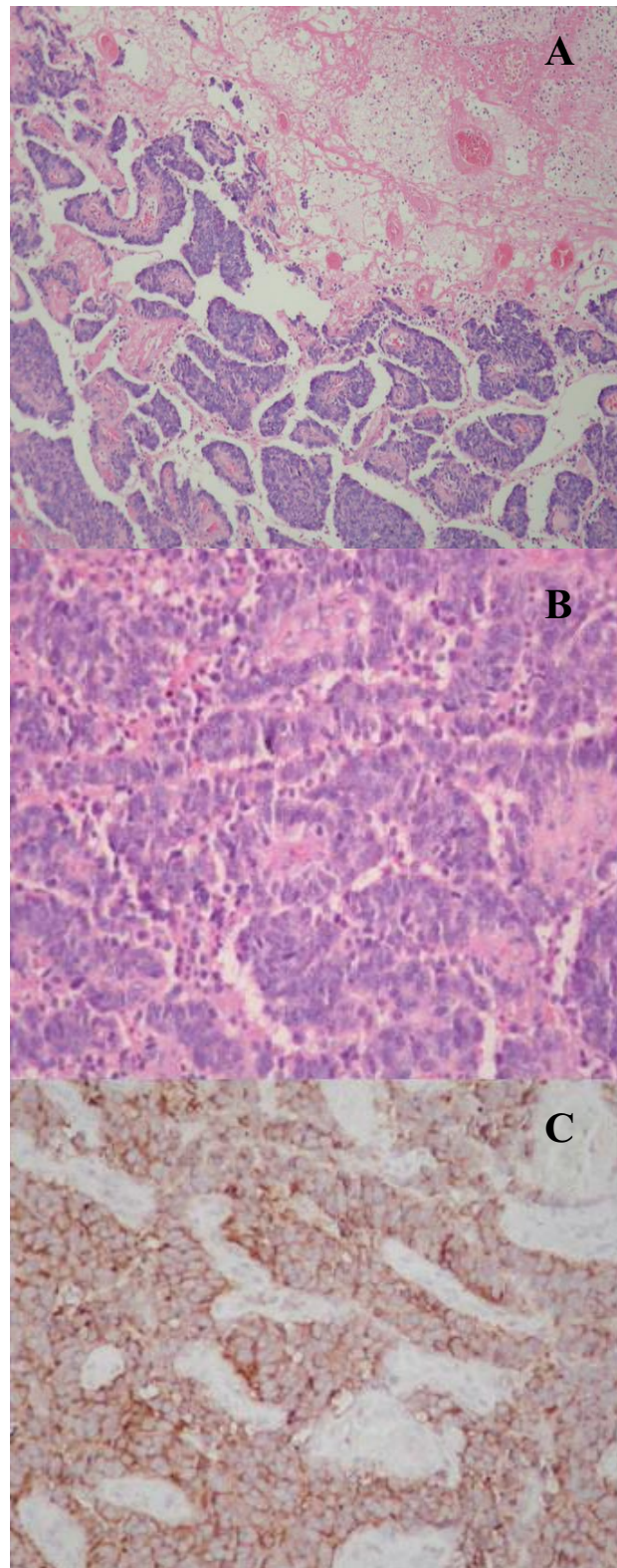


Fig 2 (A&B&C). (A): Small cell carcinoma with extensive necrosis (original magnification, H&E, x10), (B): Tumor cells are small with scanty cytoplasm, finely granular nuclear chromatin and absence of nucleoli, mitosis are frequent (original magnification, H&E, x20), (C): Synaptophysin immunoreactivity with a membranocytoplasmic staining pattern

finding on abdominal CT, and thorax CT showed stable disease. Bone scan and brain magnetic resonance imaging (MRI) were also normal. Then radiotherapy was applied to the right tonsillar area and systemic chemotherapy with cisplatin plus etoposide was started. After 2 cycles of chemotherapy he was alive and had no sign of progression.

DISCUSSION

In a review of cases of primary neoplasms complicated by tonsillar metastasis, there were few cases found to be due to small cell lung carcinoma. Most cases had evidence of metastasis to other tissues, and in all cases the tonsillar metastasis developed following presentation (2,3). Interestingly, it is known that small cell lung carcinoma disseminates widely throughout the body at an early stage with multiple metastases, the most common main metastatic sites are liver, brain and adrenal glands, not tonsillar area. However, in our case there was no metastasis to other tissues except the right tonsillary. This unusual metastasis of small cell lung carcinoma makes it different from other cases reported in the literature.

The pathogenesis of metastasis to tonsillary area is reported that secondary deposits from a primary neoplasm

are responsible for only a small number of all tonsillar tumors. In a series of 1547 tonsillar tumors, only 12 were due to metastasis, the rest resulting from either primary carcinoma or lymphoma of the tonsil (4). They included carcinoma of the breast, stomach, hypernephroma, seminoma, melanoma and rectum. Spread of secondary tumor to the tonsil is thought to occur as a result of retrograde movement of tumor cells through lymphatic vessels of the neck, either from the thoracic duct or from the veins of the neck, and firm-there to the tonsil itself (4).

Most patients with tonsillar metastases are symptomatic, such as difficulty in breathing, sore throat, irritable cough, dysphagia, otalgia, and swallowing pain accompanied by a foreign body-like sensation (5,6). As seen in our case, tonsillar metastasis of primary small cell lung carcinoma which presents as a white hard object in 2 cm diameter may lead to difficulty in breathing and swallowing pain.

Depending on the case presented here, isolated unitonsillar metastasis of small cell lung cancer is a highly unusual metastasis pattern, but it could occur and it should be kept in mind as a rare cause.

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