Journal of Oral and Maxillofacial Surgery, Medicine, and Pathology xxx (2016) xxx–xxx

Contents lists available at ScienceDirect

Journal of Oral and Maxillofacial Surgery, Medicine, and Pathology

journal homepage: www.elsevier.com/locate/jomsmp

Case Report

Small cell carcinoma in the palatal mucosa: A case report

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ARTICLE INFO

Article history:
Received 14 December 2015
Received in revised form 29 January 2016
Accepted 14 April 2016
Available online xxx

Keywords:
Small cell carcinoma
Palatal mucosa
Metastasis

ABSTRACT

Small cell carcinoma in the oral and maxillofacial region is an extremely rare, high-grade malignancy. We report a case of small cell carcinoma in the palatal mucosa. An 80-year-old man was referred to our clinic with swelling in the right maxilla. An 80-mm lymph node was seen in the right neck. The clinical diagnosis was malignant tumor of the palatal mucosa and biopsy was performed. The histopathological diagnosis was small cell carcinoma. Systemic examination diagnosed cervical lymph node metastasis, liver metastasis and multiple bone metastases. Considering the clinical stage and performance status, best supportive care was selected. The patient died of multiple-organ failure 3 months after the first visit.

1. Introduction

Small cell carcinoma (SmCC) can occur in any organ, but is most commonly seen in the lungs. Occurrences in the esophagus, stomach, duodenum, liver, pancreas, bladder, uterus, prostate, breast, and skin have also been reported [1]. Extrapulmonary primary SmCC comprises 5.9% of all SmCCs, whereas tumors in the head and neck region comprise only 0.4% [2]. SmCC is a high-grade malignancy and patients show poor prognosis. Very few reports have described SmCC, and no therapy for head and neck SmCC has been established [3]. We report an extremely rare case of SmCC in the palatal mucosa.

2. Case report

An 80-year-old man was referred to our hospital with swelling of the right maxilla. He had been attending a geriatric health service facility, where a nurse had noticed bleeding from the oral cavity. His medical history included dementia, diabetes, and hemiplegia due to the late effects of cerebral infarction. His face showed an asymmetrical appearance, and an 80-mm, painless mass with induration was found in the right neck. Clinical oral examination revealed an elastic, hard mass measuring 45 mm × 35 mm in the right palatal mucosa (Fig. 1). The mass was painless with smooth surface mucosa and with no ulceration, but the margins were unclear.

Computed tomography (CT) showed a mass with bone destruction in the right palatal region and multiple enlarged lymph nodes in the right neck (Fig. 2). In addition, a metastatic lesion was detected in the liver, but no lesions were evident in the lung. Subsequent ^{18}F-flurodeoxyglucose (FDG) positron emission tomography (PET)-CT showed abnormal accumulation in the right maxilla (SUVmax, 8.26) and right neck (SUVmax, 9.09). Abnormal accumulations were also detected in vertebrae, innominate bone, and femur (Fig. 3).

The clinical diagnosis was malignant tumor of the palatal mucosa, cervical lymph node metastasis, liver metastasis, and multiple bone metastases. Biopsy was performed under local anesthesia, leading to a pathological diagnosis of SmCC. Aspiration cytology for cervical enlargement lymph nodes was performed, and the diagnosis was Class V tumor. The preoperative diagnosis was neuroendocrine-type SmCC (T3N3M1, stage IVb) originating in the palatal mucosa.

Because of the distant metastases, the clinical stage was categorized as stage IV, and surgical resection was not performed. Chemotherapy was not administered because of the old age and poor performance status (PS4) of the patient, and best supportive care (BSC) was therefore provided. He was transferred to a nearby hospital and died of multiple-organ failure 3 months after initial diagnosis.

☆ AsianAOMS: Asian Association of Oral and Maxillofacial Surgeons; ASOMP: Asian Society of Oral and Maxillofacial Pathology; JSOP: Japanese Society of Oral Pathology; JSOMS: Japanese Society of Oral and Maxillofacial Surgeons; JSOM: Japanese Society of Oral Medicine; JAMI: Japanese Academy of Maxillofacial Implants.

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http://dx.doi.org/10.1016/j.ajoms.2016.04.008
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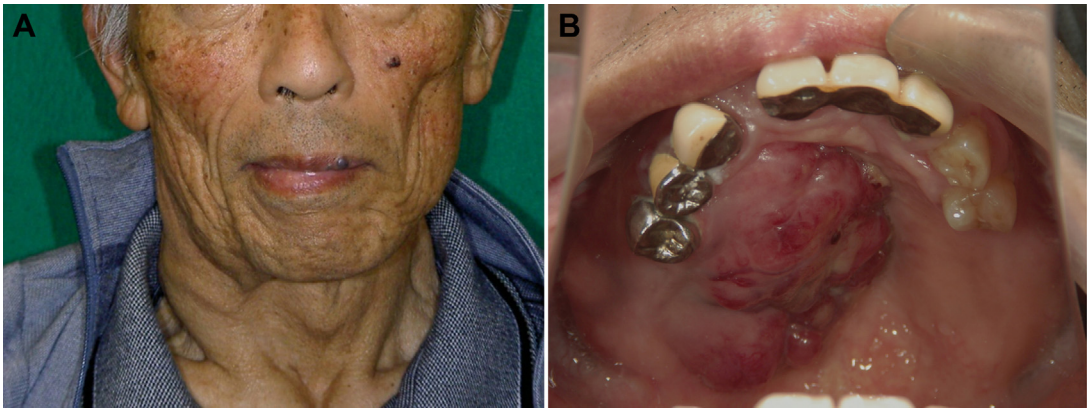

Fig. 1. (A) In the right side of neck 80-mm painless mass is found. His face is an asymmetrical appearance. (B) Intraoral photograph shows an elastic hard mass at the right palatal mucosa. The surface mucosa is smooth, and ulceration is absent.

Histopathological examination showed the growth of atypical cells lacking in cytoplasm in a small circle under the epithelium (Fig. 4). Malignant lymphoma was suspected based on hematoxylin and eosin (HE) staining because cell adhesion and alveolar growth were weak. However, immunohistochemical staining showed slight positive results for pancytokeratin, an epithelial marker, and positive results for CD56 and synaptophysin, as neural markers (Fig. 5). Negative results were obtained for markers of

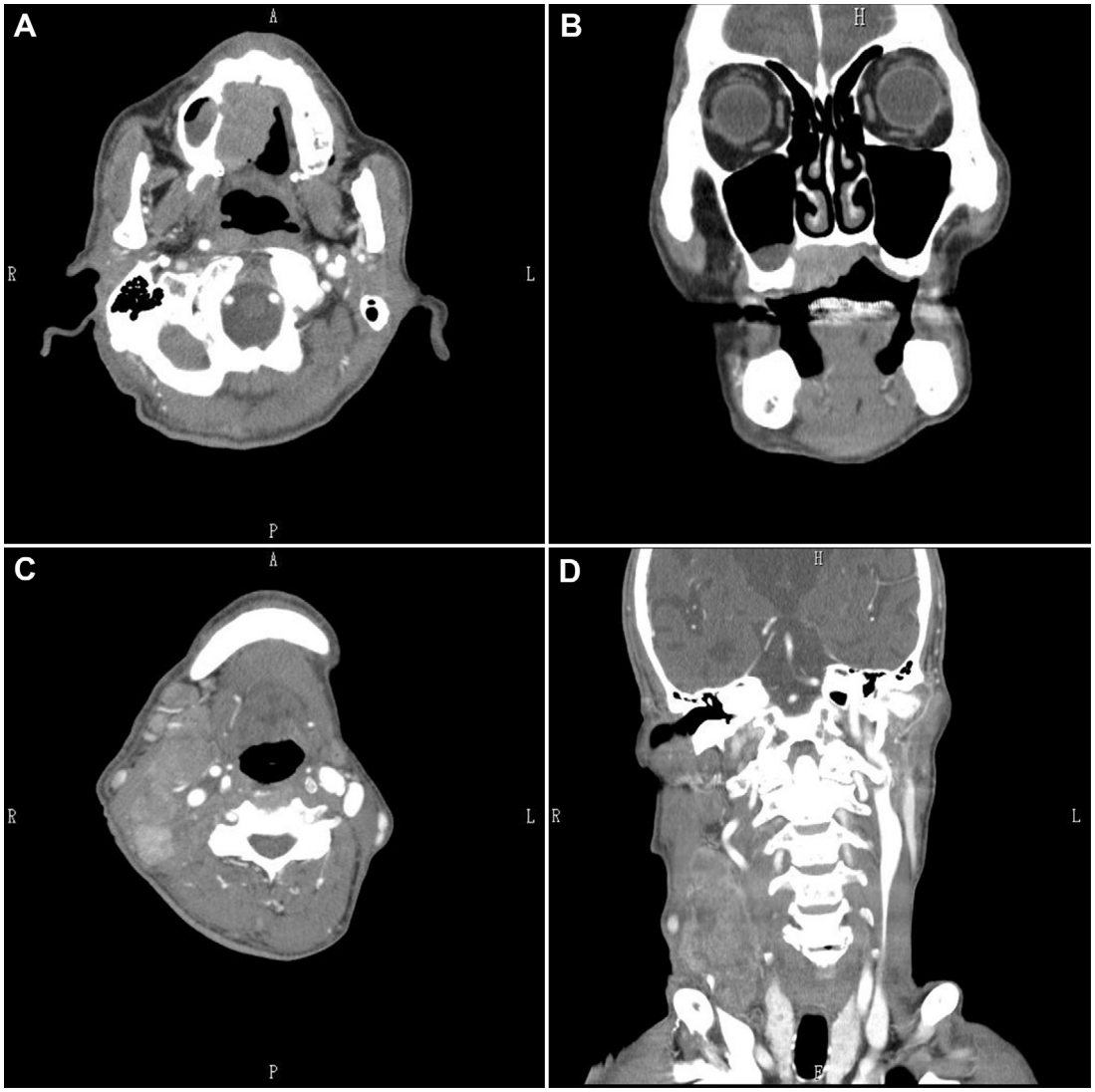

Fig. 2. Enhanced CT. The right maxilla shows a mass with bone destruction (A: axial view, B: coronal view). Multiple enlarged lymph nodes are apparent, and show formation of a giant mass (C: axial view, D: coronal view).

Please cite this article in press as: Sase M, et al. Small cell carcinoma in the palatal mucosa: A case report. J Oral Maxillofac Surg Med Pathol (2016), http://dx.doi.org/10.1016/j.ajoms.2016.04.008