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Oral mucosal melanoma: Case report

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Oral mucosal melanoma;
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Oral mucosal melanoma (OMM) is a very rare malignant neoplasm of the oral cavity. It occurs more frequently at the hard palate and maxillary alveolus.[1] In this case report, we presented an OMM at the right posterior edentulous maxillary alveolar ridge of an 80-year-old female patient.

This 80-year-old female patient found a rapidly-growing mass at the right posterior edentulous maxillary alveolar ridge about 3 months ago. She visited several medical centers for consultation but did not obtain an appropriate treatment and finally came to our hospital for consultation. Intraoral examination revealed a non-tender multinodular lesion at the right posterior edentulous maxillary edentulous alveolar ridge which extended to vestibular mucosa and hard palate across over the midline. The tumor mass was pink to red with focal black and bluish areas (Fig. 1A). Radiographic examination revealed an ill-defined radiolucent lesion mainly in the right posterior edentulous maxillary edentulous alveolar ridge. The clinical impression was an OMM. The patient was referred to Oral and Maxillofacial Surgery Department for biopsy. The histopathological examination of the biopsy specimen showed a neoplasm composed of a sheet of pleomorphic epithelioid tumor cells interspersed with some large and small tumor cells and melanophages with melanin pigmentation (Fig. 1B). Immunohistochemical studies exhibited that the tumor cells were positive for human melanoma black (HMB)-45 and S-100 protein, respectively (Fig. 1C and D). Thus, an OMM was confirmed. The treatment plan for this OMM was total removal of the tumor with at least a 1-cm margin. The patient and her family members said that they would consider seriously whether the patient could tolerate the surgery. However, the patient did not come back to the clinic and finally was lost to the follow-up.

Although the cutaneous melanomas can be divided into four types (superficial spreading, nodular, lentigo maligna, and acral lentiginous melanomas), acral (or mucosal) lentiginous melanoma is the most common form of OMM. Immunohistochemical staining is usually used for identification of the origin of tumor cells.[2–5] By hematoxylin and eosin stain, the presence of melanin pigmentation in the tumor cells or melanophages can help the histological diagnosis of OMM. However, approximately 10% of OMMs are amelanotic. A lack of melanin production may result in diagnostic confusion with various other undifferentiated cancers at the microscopic level. In this situation, three immunostaining methods using antibodies against HMB-45, S-100 protein, and MART-1 (Melan A) are often used to identify the melanoma cells. In this study, the OMM cells were positive for HMB-45 and S-100 protein. Therefore, the histopathological diagnosis of OMM could be confirmed.[1]

Surgical excision is the mainstay of treatment for OMM. The prognosis for OMM is extremely poor with the 5-year survival rate being in the range of only 10%–25%.[1] The poor prognosis for OMM appears to be related to difficulty in achieving wide resection and a tendency for early metastasis. Younger patients have better survival than older patients, and patients with amelanotic OMM have a particularly poor prognosis.

Declaration of Competing Interest

The authors have no conflicts of interest relevant to this article.

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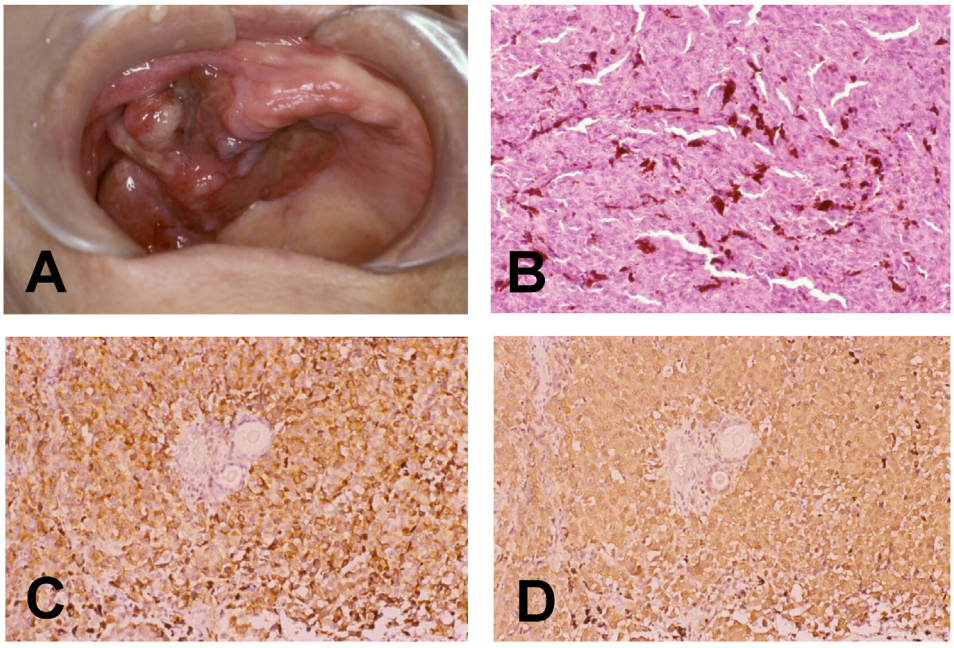

Figure 1 Clinical, histological, and immunostained photographs of our case of oral mucosal melanoma. (A) Clinical photograph demonstrating a multinodular tumor at the right posterior edentulous maxillary edentulous alveolar ridge which extended to vestibular mucosa and hard palate across over the midline. The tumor mass was pink to red with focal black and bluish areas. (C) Microphotographs exhibiting a neoplasm composed of a sheet of pleomorphic epithelioid tumor cells interspersed with some large and small tumor cells and melanophages with melanin pigmentation (Hematoxylin and eosin stain; original magnification, 20×). (C and D) Immunostained microphotographs revealing that the tumor cells were positive for HMB-45 (C, original magnification, 20×) and S-100 protein (D, original magnification, 20×).

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Chieh-Wei Lin
Yi-Pang Lee
Department of Dentistry, Hualien Tzu Chi Hospital, Buddhist Tzu Chi Medical Foundation, Hualien, Taiwan

Ming-Jay Hwang
Department of Dentistry, Hualien Tzu Chi Hospital, Buddhist Tzu Chi Medical Foundation, Hualien, Taiwan
Department of Dentistry, National Taiwan University Hospital, College of Medicine, National Taiwan University, Taipei, Taiwan

Chun-Pin Chiang*
Department of Dentistry, Hualien Tzu Chi Hospital, Buddhist Tzu Chi Medical Foundation, Hualien, Taiwan
Department of Dentistry, National Taiwan University Hospital, College of Medicine, National Taiwan University, Taipei, Taiwan
Graduate Institute of Oral Biology, School of Dentistry, National Taiwan University, Taipei, Taiwan

*Corresponding author. Department of Dentistry, Hualien Tzu Chi Hospital, Buddhist Tzu Chi Medical Foundation, No. 707, Section 3, Chung-Yang Road, Hualien, 970, Taiwan.
E-mail address: cpchiang@ntu.edu.tw (C.-P. Chiang)

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