

Primary oral malignant melanoma of the tongue

Ahmed Abu-Zaid, Nabil Al-Zaher

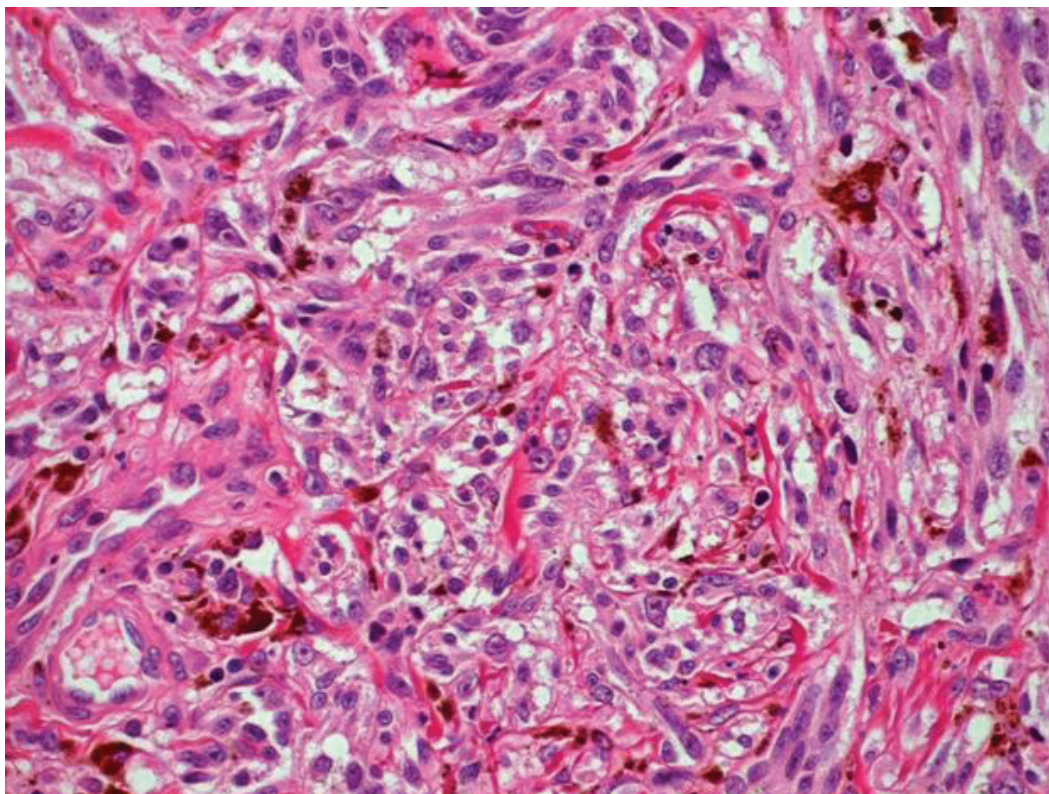
A 30-year-old man presented with a two-month history of tongue discoloration. Past medical history was negative for skin disorders. Physical examination of the oral cavity revealed general poor dentition with suspicious tar staining of teeth from cigarette smoking/tobacco use. Further examination showed numerous, flat to slightly raised, ill-defined, non-tender and purple lesions involving the dorsum of the tongue with scattered islands of leucoplakia (Figure 1A). Patient had no other lesions within the oral cavity. Biopsy of the lesions showed malignant melanoma. Full oncological work-up showed no evidence of regional or distant metastasis. Patient was managed with subtotal glossectomy,

bilateral supraomohyoid neck dissections and reconstruction with a revascularised radial forearm free flap. Histopathological examination showed sheets of epithelioid and spindle-shaped malignant melanocytes (Figure 1B). Immunohistochemical examination showed positive reactivity to S-100 and HMB-45 proteins. The bilateral supraomohyoid neck dissections were negative for malignancy. The final histopathological diagnosis was compatible with primary oral malignant melanoma (OMM) of the tongue. Post-operatively, no adjuvant therapy was administered, and the patient had an uneventful recovery course. No recurrence was detected at 12-month follow-up.

Figure 1A: Primary oral malignant melanoma (OMM) of the tongue.



Gross picture of the tongue showing multiple, flat to slightly elevated, non-tender, ill-defined and whitish-purple lesions with scattered islands of leucoplakia.

Figure 1B: Primary oral malignant melanoma (OMM) of the tongue.

Histopathological examination of the subtotal glossectomy showing sheets of epithelioid and spindle-shaped malignant melanocytes (H&E stain, magnification power: 40x).

Primary OMM of the tongue is rare, and can originate from pre-existing melanocytic (pigmented) lesions, or develop *de novo* from a malignant transformation and an uncontrolled proliferation of neural crest-derived melanocytes that are normally situated in the basal layer of oral mucosa.¹

Australia and New Zealand harbour the highest incidence rates of cutaneous malignant melanoma worldwide.² However, to the best of knowledge, from New Zealand, no single case of primary non-cutaneous (mucosal) OMM has been reported in the PubMed literature.

Competing interests:

Nil.

Author information:

Ahmed Abu-Zaid, College of Graduate Health Sciences, University of Tennessee Health Science Center, Memphis, Tennessee, United States; Nabil Al-Zaher, Department of Otolaryngology, Head & Neck Surgery, King Faisal Specialist Hospital & Research Centre, Riyadh, Saudi Arabia.

Corresponding author:

Dr Ahmed Abu-Zaid, College of Graduate Health Sciences, University of Tennessee Health Science Center, 910 Madison Ave, Memphis, Tennessee, United States.
aabuzaid@live.com

URL:

<http://www.nzma.org.nz/journal/read-the-journal/all-issues/2010-2019/2018/vol-131-no-1470-23-february-2018/7499>

REFERENCES:

1. Hicks MJ, Flaitz CM. Oral mucosal melanoma: epidemiology and pathobiology. *Oral Oncol.* 2000; 36:152–69.
2. Sneyd MJ, Cox B. A comparison of trends in melanoma mortality in New Zealand and Australia: the two countries with the highest melanoma incidence and mortality in the world. *BMC Cancer.* 2013; 13:372.