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Recommended Citation

Lin, Hung-Pin and Lin, Yun-Ho () "Adenosquamous carcinoma of the gingiva–A case report," *Journal of Dental Sciences*: Vol. 21: Iss. 2, Article 79.

Available at: <https://jds.ads.org.tw/journal/vol21/iss2/79>

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KEYWORDS

Adenosquamous carcinoma;
Gingiva;
Mandible

An adenosquamous carcinoma (ASC) is one of the rare variants of squamous cell carcinoma (SCC).¹ The site of predilection of ASCs in the head and neck region is the larynx.^{1,2} The oral cavity is also one of the possible sites to be involved by the tumor.¹ Although the etiology is unknown, cigarette smoking and alcohol drinking are the risk factors of the lesion, similar to other variants of SCC.^{2,3} Here we reported a case of ASC in the oral cavity. The study of this case was approved by the Institutional Review Board at the MacKay Memorial Hospital, Taipei, Taiwan (25MMHIS442e).

A 60-year-old male diabetic patient visited our hospital with the chief complaint of a painful tumor in the oral cavity. Intraoral examination showed a firm mass with irregular and ulcerative surface, measuring 2.3 cm in greatest dimension, on the left posterior mandibular gingiva. The presence of bony destruction was suspected by the panoramic radiograph (Fig. 1A) and was highlighted by the computed tomography (CT) (Fig. 1B). Under the impression of a SCC, wide excision of the lesion was performed and the specimen was sent for histopathological examination.

Microscopically, it showed invasive tumor cell nests arising from the adjacent dysplastic epithelium (Fig. 1C). The invasive tumor was featured by biphasic patterns, consisting tumor cell nests with morphologies of conventional SCCs with keratinization (Fig. 1D) and adenocarcinoma (Fig. 1E). The presence of intracytoplasmic mucin was confirmed by the mucicarmine stain (Fig. 1F, arrowhead) and alcian blue stain (Fig. 1G, arrowhead). For the

expression of cytokeratin 7, the squamous part (Fig. 1H, arrowhead) was negative or weakly and focally positive, but the glandular component was generally positive (Fig. 1H, asterisk). Both the squamous and glandular components were negative for cytokeratin 20 (data not shown). Based on the histopathologic features of the standard hematoxylin and eosin (H&E) stain, immunostain and histochemical stain, the final diagnosis of our case was an ASC arising from the gingival epithelium. Further histopathological examination showed no evidence of metastatic carcinoma of the neck lymph nodes.

A recent review by Abé et al. summarized the clinical features of ASCs in the oral cavity.⁴ The mean age of the patient is 60 years (ranging from 22 to 97 years) with a male predilection.^{1,4} The tongue is the most frequent site (49.0%) and the mandibular gingiva comprise about 7.8% of the cases.⁴ An ASC is considered as an aggressive tumor with poor prognosis,^{2,4} although it is considered to be similar to that of the conventional SCC in a few studies.¹

The list of differential diagnosis of ASC from other oral malignancies includes conventional and variants (acantholytic/adenoid and basaloid variants) of SCC, as well as mucoepidermoid carcinoma.^{1,2,4} The results of immunohistochemical and histochemical staining play important roles in the definitive diagnosis of an ASC.

This case report described an ASC arising from the mandibular gingiva, emphasizing the need to consider the disease entity in the differential diagnosis of a malignant neoplasm of the oral cavity.

<https://doi.org/10.1016/j.jds.2026.01.015>

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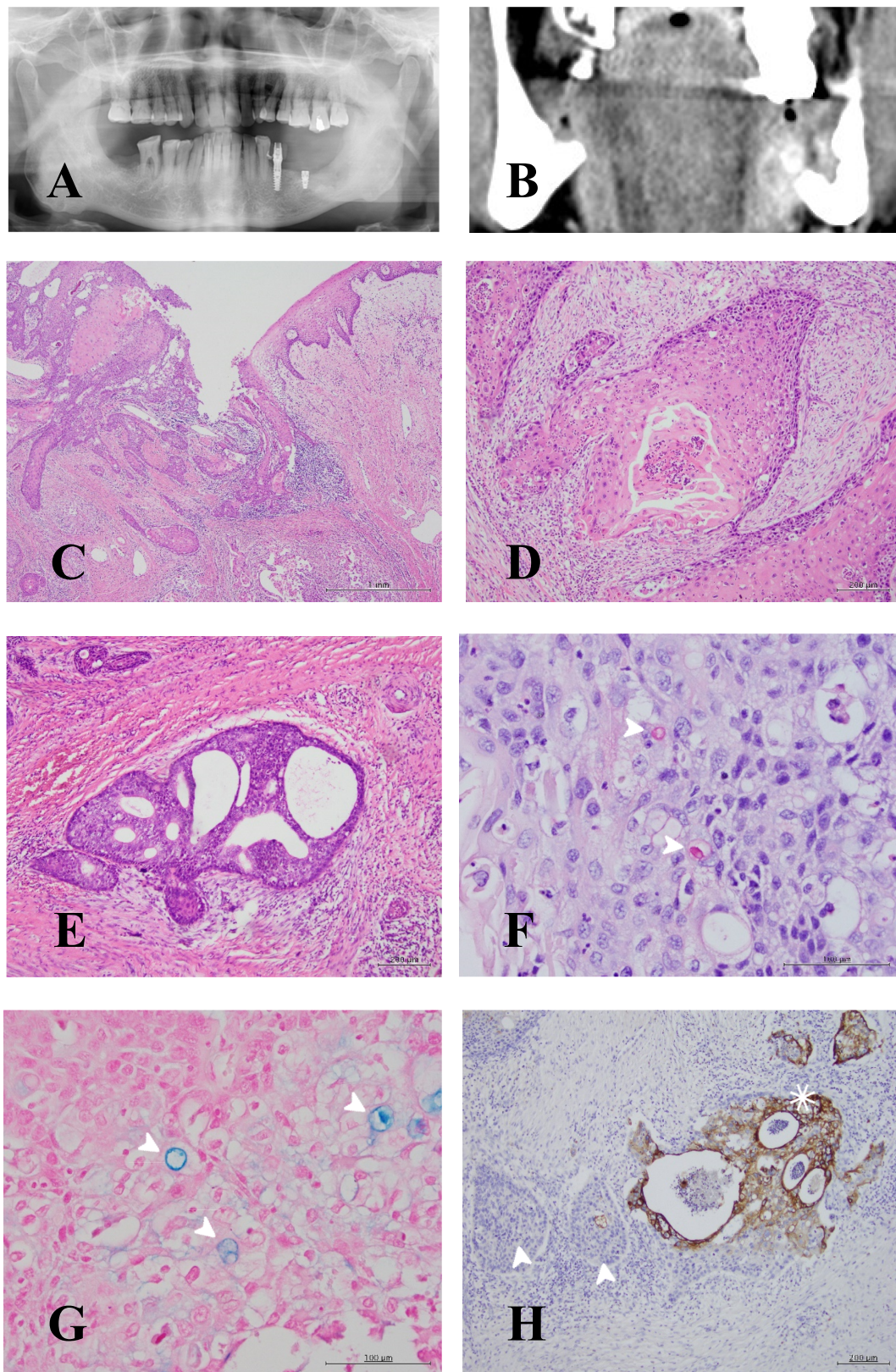


Figure 1 Image studies and histopathologic photomicrographs of the hematoxylin and eosin-stained and immunostained sections of our ASC case. Image studies consisting of (A) panoramic radiograph and (B) cropped computed tomography (CT) image of the patient. (B) Enhanced lesion with destruction of the left posterior mandible bone was noted on the cropped image of CT. (C) Low-power photomicrographs showing invasive tumor cell nests arising from the adjacent dysplastic gingival epithelium. (D) Medium-power photomicrograph exhibiting tumor cell nests with the morphology of a conventional SCC. (E) There was also a

Declaration of competing interest

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

Acknowledgments

None.

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Received 19 December 2025
Final revision received 13 January 2026
Available online 1 April 2026

proliferation of tumor cell nests with the morphology of adenocarcinoma. (F) The presence of intracytoplasmic mucin confirmed by mucicarmine stain (arrowhead) and (G) the alcian blue stain pH2.5 (arrowhead). (H) The results of immunohistochemical stain with cytokeratin 7 reveal that the squamous part (arrowhead) was negative or weakly and focally positive for cytokeratin 7, but the glandular component was generally positive for cytokeratin 7 (asterisk). (Scale bar: C = 1 mm, D and E = 200 μ m, F and G = 100 μ m, H = 200 μ m).