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Case Report

Adenoid cystic carcinoma: A rare late presentation of the mobile tongue

Sanjay Kumar [a,*], Padmanidhi Agarwal [a], V. Nimmi [b]

[a] Senior Resident, Department of Oral and Maxillofacial Surgery, King George's Medical University, Lucknow, India
[b] Junior Resident, Department of Conservative Dentistry & Endodontics, Government Dental College, Kottayam, Kerala, India

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ABSTRACT

Adenoid cystic carcinoma (ACC) is an infrequent malignant neoplasm of the salivary glands. We present a case of a 70-year-old male patient with a swelling over the dorsal and ventral surface of anterior two third of the tongue which was causing him difficulty in mastication since 10 months. Ultrasound and magnetic resonance imaging were done following which the surgical excision of the lesion was performed and histopathological diagnosis of ACC was achieved. It was rare to find ACC in such an old man with such a large lesion presenting so late in the rare site of the mobile tongue. ACC is a slowly growing, highly invasive cancer with a high recurrence rate and chances of metastases, so surgery is the choice of treatment with mandatory long-term follow-up.

1. Background

Adenoid cystic carcinoma (ACC) is an infrequent malignant neoplasm that represents approximately 1–2% of all malignant neoplasms of the head and neck and 10–15% of all malignant salivary gland neoplasms. It can originate in the minor or major salivary glands.[1] It is more common in females and characterized by slow indolent growth, affinity for nerve invasion and potential to produce distant metastases, mainly to the lungs and bones.[2] One of the least frequent sites of presentation is the mobile tongue, the incidence of only approximately 3% having being reported.[3]

2. Case report

A 60-year-old man presented with a growth on the tongue causing him oral discomfort and masticatory difficulties for the past 10 months. There was no significant medical history or addiction. On examination, a mass was noticed on the tongue extending antero-posteriorly from the tip to the posterior one third and involved both dorsal and ventral surfaces, measuring about $50 \times 30 \times 20$ mm [Fig. 1]. It was larger on the right side, involving and crossing the midline. The mass was firm, of the same colour as that of the surrounding mucosa, had a smooth surface and was slightly

* *Corresponding author.*
E-mail address: drskomfs@gmail.com (S. Kumar).
Abbreviations: ACC, adenoid cystic carcinoma; FNA, fine needle aspiration; MRI, magnetic resonance imaging.
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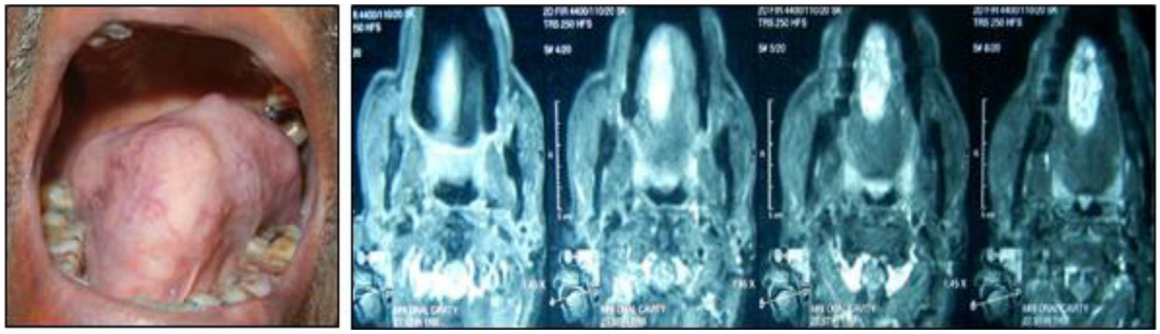

Fig. 1 – Preoperative clinical presentation and MRI (axial view) of tongue.

tender on palpation. There was no evidence of cervical lymphadenopathy.

Ultrasonography was advised and reports were suggestive of haemangioma. Magnetic resonance imaging (MRI) revealed an ill-defined moderate sized soft tissue lesion with altered signal entities involving the dorsum of tongue with invasion suggestive of benign neoplasm (Fig. 1). Fine needle aspiration results were inconclusive. Laboratory blood investigations were within normal limits. With provisional diagnosis of schwannoma of tongue, the patient was planned for surgical excision of lesion under GA.

The patient was positioned supine and general anaesthesia was given through nasal intubation. Following aseptic measures, incision was placed over right lateral border of tongue from tip of tongue to the posteriorly till 2/3rd of tongue. After separating the dorsal and ventral surfaces of tongue, the lesion was identified and dissected superiorly inferiorly and medially. A lobulated firm mass with irregular borders was identified with a thick posterior-inferior pedicle, subverting more inferiorly towards base of the tongue. The pedicle was dissected meticulously, ligated with 2-0 silk and divided with scalpel. Haemostasis was achieved. The specimen was tagged over margins and sent for histopathologic examination. Macroscopically, the mass was brown in colour with an irregular surface, measured $80 \times 40 \times 20$ cm and was firm in consistency [Fig. 2]. The histopathologic study showed multiple pseudocystic spaces of variable sizes surrounded by cuboidal cells with scarce cytoplasm and oval nuclei, filled with eosinophilic material and hence was diagnosed as cribriform ACC [Fig. 2]. There was no evidence of perineural infiltration on serial sections and the surgical margins were negative. Immunohistochemistry analysis showed expression of p16 which further confirmed the diagnosis (Table 1).

Post-operatively, the patient has been on regular follow-up to note for any recurrence and three years after treatment, he is well without any evidence of relapse.

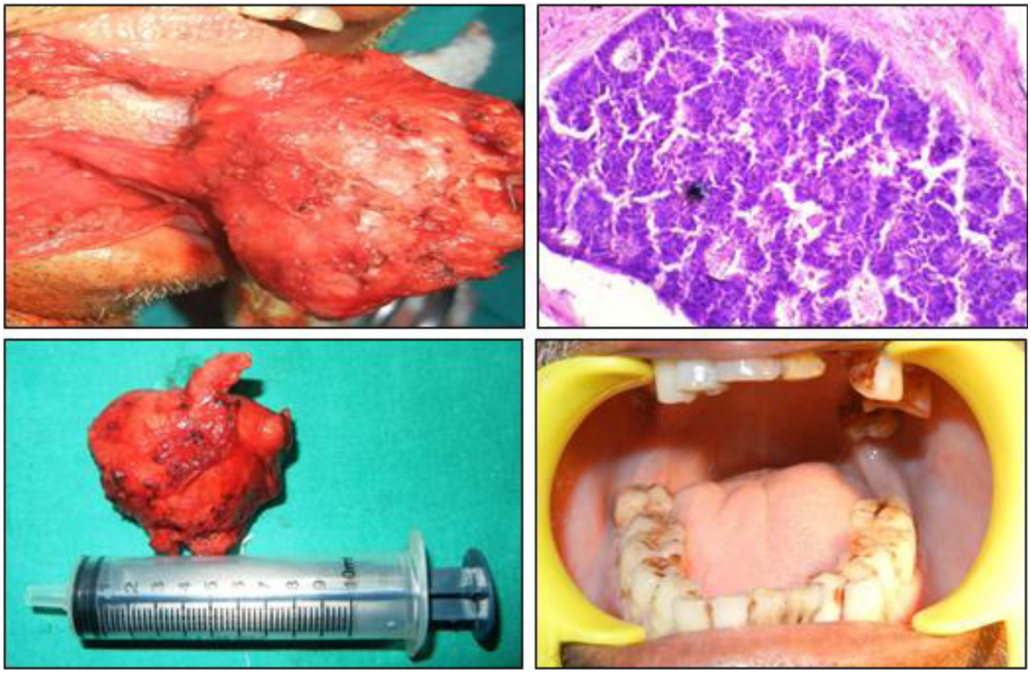

Fig. 2 – Excised lesion with histopathology and postoperative view of tongue.