

Acinic Cell Carcinoma in Minor Salivary Glands of Retromolar Trigone

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✓ Acinic cell carcinoma (ACC) is a rare malignant tumor of the salivary glands. ACC of the minor salivary glands is very rare. In the oral cavity, minor salivary gland tumors are rarely seen in the inferior anatomic regions like the retromolar trigone and the floor of mouth compared to the superior regions like the palate. We present a retromolar trigone ACC, a rare location in the oral cavity and discuss the relevant reports in the literature.

Key words: Acinic cell carcinoma, minor salivary glands, retromolar trigone

✓ **Retromolar Trigon Minör Tükrük Bezlerinde Asinik Hücre Karsinomu**
Asinik cell karsinoma, tükrük bezlerinin nadir görülen malign tümörlerindedir. Asinik cell karsinoma, minör tükrük bezlerinde de az ratlanan bir tümördür. Oral kavitede, minör tükrük bezi tümörleri; damak gibi süperior anatomik bölgelerle karşılaştırıldığında, ağız tabanı ve retromolar trigonun yer aldığı inferior anatomik bölgelerde nadiren görülür. Bu olgu sunumunda, oral kavitede nadir yerleşim yeri olan retromolar trigonda asinik hücre karsinomalı bir hastayı, ilgili literatürü de gözden geçirerek tartıştık.

Anahtar kelimeler: Asinik cell karsinomu, minör tükrük bezleri, retromolar trigon

INTRODUCTION

Acinic cell carcinoma is a rare malignant tumor of the salivary glands. It's mostly seen in the parotid gland. ACC accounts for 3-4% of parotid tumors, 2-6% of all salivary gland tumors and 10-17% of all malignant salivary gland tumors^(1,2). ACC of the minor salivary glands is very rare. In 1987 Hiratsuka et al.⁽³⁾ reviewed 84 intraoral minor salivary gland ACC cases. Of these 84 cases; 28 were in the palate, 20 were in the buccal mucosa,

17 were in the lip, 8 were in the tongue, 7 were in the retromolar trigone, 2 were in the floor of mouth and 2 were in the gingiva. In the oral cavity, minor salivary gland tumors are rarely seen in the inferior anatomic regions like the retromolar trigone and the floor of mouth compared to the superior regions like the palate. We present a retromolar trigone ACC, a rare location in the oral cavity and discuss the relevant reports in the literature.

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CASE REPORT

53-year-old female was admitted to the Ear-Nose-Throat department with the chief complaint of throat pain for 4-5 months. She denied bleeding and gustatory changes. She has had a dental prosthesis involving the lesion site for 4 years. Her physical examination revealed an ulcerated mass measuring 3x3 cm in the left retromolar trigone extending to the anterior tonsillar pillar posteriorly and mandible inferiorly (Fig 1). By physical examination, salivary flow was observed to be normal in both Wharton and Stenon ducts. No regional lymphadenopathy was observed. Routine laboratory data and chest X-ray were normal. Computed tomography revealed a mass measuring 3x3x4 cm with hypodense foci, smooth borders and homogenous contrast intensity, located in the left retromolar trigone anteromedial to medial pterygoid muscle and body of mandible. Incisional biopsy was consistent with ACC. Under general anesthesia, the tumor was resected intraorally with 1 cm margins of safety including inner periosteum of mandible. Tumor was encapsulated with smooth borders, hard in consistency, ovoid in shape and measured 4x4x3 cm.

HISTOPATHOLOGY

A 6x3x2.5 cm resection material with a 6x3 cm mucosal ellipse was submitted for pathology. Grossly, very close to the basal surgical border, a 3x2x1.3 cm, well circumscribed unencapsulated soft tissue mass, of soft consistency and gray to light brownish color was observed. On microscopic evaluation, a tumor composed of abortive acinar units was seen. Tumor cells had oval to round nuclei which stained moderately with hematoxyline, and large, clear and finely granular cytoplasm. There were incidental mitosis but no necrosis (Fig.2).

DISCUSSION

ACC was first described by Nasse in 1892 as a benign tumor⁽⁴⁾. However, in the 1950's, ACC was reported to be malignant, originating



Figure 1. Physical examination revealed an ulcerated mass measuring 3x3 cm in the left retromolar trigone extending to the anterior tonsillar pillar posteriorly and mandible inferiorly.

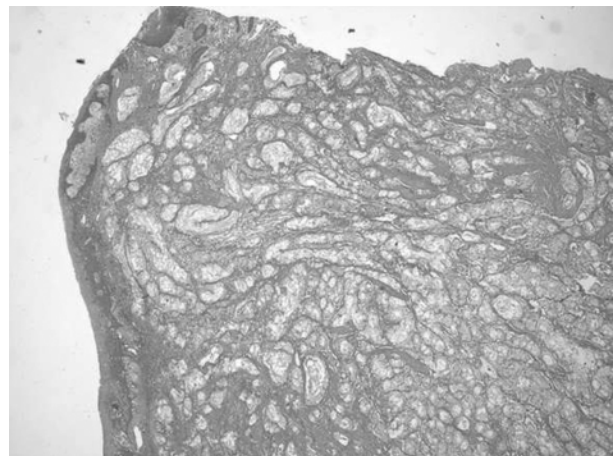


Figure 2. Typical microscopic appearance of the acinic cell carcinoma infiltrating subepithelial connective tissue H.Ex200.

from reserve cells of salivary gland ducti and besides local recurrence, pulmonary and bone metastasis was observed⁽⁵⁾. Although the disease incidence peaks at 30-60 years and is more common in females; it may be seen at any age group and gender^(1,2). Clinically, a non-tender swelling is recognized incidentally or during dental examination^(4,6). Dental prosthesis is believed to have an effect in the etiology. They may be seen as ulcerated mucosal lesions of various sizes. ACC may appear in solid, microcystic, follicular and papillary-cystic patterns⁽²⁾. No correlation was observed between histopathological appearance and biologic

behaviour of tumor. However, some trials claimed to foresee the clinical outcome with size of tumor, degree of differentiation and infiltrative margins. Local recurrence rate was reported to be 12-50% in most trials. Metastatic progression occurs via the lymphatics to cervical lymph nodes and spreads hematogenously to lungs or bones. Reported metastatic rates range from 7 to 29%⁽⁵⁾. Local excision is the treatment of choice. Radiotherapy (RT), chemotherapy and lymph node dissection are controversial as alternative treatment options. RT can be preferred as adjunctive therapy to surgery in clinically aggressive cases. RT is not essential in cases of small tumors in which resection margins are free of tumor⁽⁷⁾. Callender et al.⁽⁸⁾ reported that postoperative irradiation, according to the Texas MD Anderson Cancer Center, was recommended for high grade tumors with close or invaded margins, perineural invasion and multiple positive lymph nodes. Eneroth et al.⁽⁹⁾ presented 10 cases of parotid gland ACC cases which were treated with surgery and RT. Patients were operated on 6 weeks after they were given 2800-4200 rad. He observed some tumors responding well to RT with good outcomes. There are few studies confirming the effect of RT on ACC. Fermont⁽¹⁰⁾ treated an ACC case; measuring 5 cm, invading the inferior pole of tonsil, posterior third of the tongue and the midline with RT only. Tongue base, the floor of mouth and the retromolar trigone are the anatomic sites that can be overlooked during oral examination⁽¹⁰⁾. In general, patients see a doctor with complaints of pain and bleeding in diseases of these anatomic regions. Thus, tumors of these sites are generally recognized in the advanced stage. Treatment plans in patients with histopathologic verification is made by considering the patient's general health status, size of the tumor, site of location and accessibility of the tumor. In our case, the tumor was resected intraorally including the inner periosteum of mandible, mylohyoid muscle and anterior tonsillar pillar. Postoperative RT was given regarding the infiltrative surgical

margins and difficulty in re-exploration and determining the site of the tumor. There is no recurrence in the third year, postoperatively. We believe in the benefit of RT after surgery in cases with infiltrative margins and large tumors in the floor of mouth.

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