Adenoid Cystic Carcinoma of Mandible

Thiago de Santana Santos¹, Daniela Guimarães de Melo², Ana Cláudia Amorim Gomes³, Emanuel Sávio de Souza Andrade⁴, Emanuel Dias de Oliveira e Silva⁵

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INTRODUCTION

Malignant neoplasms of the salivary glands are relatively uncommon; they account for less than 7% of head and neck cancers. Of these, about 10% have been diagnosed as the cystic adenoid carcinoma (CAC). This tumor is thought to originate from segment cells of the intercalar duct or the terminal tubular complex. It commonly affects subjects between the fifth and seventh decades of life, and is closely related with smoking and alcohol intake. There is no racial preference, but the tumor affects mostly women. It typically grows slowly that usually presents clinically as a hard nodule or enlarged mass covered by intact mucosa.

CASE REPORT

A brown male patient aged 48 years reported moderate pain in the left lower molar region for the past two months. On the intraoral examination, the vestibular mucosa along the left lower molar was normal and there was no mass. The oropharynx was hyperemic, and the mucosa was blackened along the lateral portion of the tongue; this area was somewhat hardened and painful upon palpation. Orthopantomography revealed a radiolucent image in the periapical areas of the left lower second molar region, especially upon palpation and metastasizes late in the progression of the disease. Radical surgery is recommended, as this approach reduces the likelihood of metastases.

The incidence of CAC varies according to the site. It comprises about 1.6% to 2.2% of all tumors and 16% of malignant tumors of the parotid glands. In the submandibular gland this percentage is 12% to 17%; in the sublingual gland this percentage is 4% to 10% of all tumors. The CAC may present as a slowly growing asymptomatic tumor, although in most cases there are palpation-induced painful events due to the fact that this tumor is markedly neurotropic. In the present case the patient had moderate pain in the lower molar region, especially upon palpation. Perineural invasion is a common finding in this disease, but is not a prognostic factor, as it arises in other salivary gland neoplasms such as in low grade polymorphic adenocarcinoma. Histopathology in the present case revealed low grade polymorphic adenocarcinoma. Immunohistochemistry to confirm the diagnosis in fact resulted in a diagnosis of CAC.

DISCUSSION

The CAC is a slow growing neoplasm that generally manifests as an enlarged mass covered by intact mucosa; it is painful upon palpation and metastasizes late in the progression of the disease. Radical surgery is recommended, as this approach reduces the likelihood of metastases.

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¹ Specialist in oral and maxillofacial surgery and trauma, Brazilian College of Oral and Maxillofacial Surgery and Trauma. Master’s degree in oral and maxillofacial surgery and trauma, Pernambuco Dentistry School (FOP/UPE).
² Specialist in oral and maxillofacial surgery and trauma, Pernambuco Dentistry School (FOP/UPE). Master’s degree student in oral and maxillofacial surgery and trauma, Pernambuco Dentistry School (FOP/UPE).
³ Doctoral degree in oral and maxillofacial surgery and trauma, Pernambuco Dentistry School (FOP/UPE). Adjunct professor of oral and maxillofacial surgery and trauma, Pernambuco Dentistry School (FOP/UPE).
⁴ Doctoral degree in oral pathology, Rio Grande do Norte Federal University (Universidade Federal do Rio Grande do Norte or UFRN). Adjunct professor of oral pathology, Pernambuco Dentistry School (FOP/UPE).
⁵ Specialist in oral and maxillofacial surgery and trauma, head of the residence program in oral and maxillofacial surgery and trauma, Oswaldo Cruz University Hospital - HUOC/UPE.

Send correspondence to: Faculdade de Odontologia de Pernambuco - FOP/UPE - Av. General Newton Cavalcanti, 1650, Camaragibe - PE. CEP: 54753-220. Paper submitted to the BJORL-SGP (Publishing Management System – Brazilian Journal of Otorhinolaryngology) on July 13, 2010; and accepted on September 18, 2010. cod. 7201.

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