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Adenoid Cystic Carcinoma of the Palate: Report Case

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Abstract | **Case Report**

Adenoid cystic carcinoma is a rare tumor, accounting for approximately 5–10% of all salivary gland neoplasms. It is a tumor which develops in 50 to 60% of cases on the minor salivary glands which are disseminated on the cheek; the lips; the palace; it is characterized by slow growth with a long-term natural evolution, quite aggressive locally, which has a tendency to local recurrence and even distant metastases (the first metastatic site of which is the lung). There are three subtypes that can exist in isolation or coexist together which are: solid; cribriform and tubular. The solid type has a poor prognosis unlike the cribriform type which has an intermediate prognosis and the tubular type which has the best prognosis. The treatment of choice remains surgical, often associated with adjuvant radiotherapy depending on the stage of progression (stage III and IV). It is almost not chemosensitive. It is a tenacious tumor and the survival rate at 05 years is 70%; after 10 years 50% and after 20 years 25%. We present a case of a 53-year-old patient; without particular pathological history, which presents an adenoid cystic carcinoma in its solid form locally advanced non-metastatic revealed by a budding mass of the hard and soft palate. Given the inoperability of the tumor; the patient was referred for Radiotherapy.

Keywords: Adenoid cystic Carcinoma, palate, Surgery, Radiotherapy.

INTRODUCTION

Adenoid cystic carcinomas, formerly called cylindromas, are generally slow-growing malignant epithelial tumors, most often developing at the expense of accessory salivary glands [1]. This pathology mainly concerns patients aged 40 to 60, regardless of gender. There is currently no known risk factor. This is the second most common type of tumor found in the salivary glands. They can affect all salivary glands but 50% to 60% develop in accessory salivary glands whose predilection site is the palate [2].

CASE REPORT

This is a 53-year-old patient; married and father of two children; Worker; originally from Youssoufia and resident of Chamaaia; smoker at 40 pack years and chronic alcoholic. the onset of symptoms dates back to January 2023 with swelling of the left soft palate without pain followed by dysphagia; all evolving in a context of apyrexia and deterioration of general condition; which motivated the patient to consult a general practitioner who was referred to the maxillofacial surgery department where he underwent a biopsy; the anatomopathological examination revealed a poorly differentiated carcinoma infiltrating the brought back mucosa and of which the morphological aspect first suggests an underlying salivary starting point and requires a complementary immunohistochemical study to clarify with certainty its nature (Figure 5). Immunohistochemistry suggests an adenoid cystic carcinoma in its solid form, localized on the palate with positivity for anti-CK7 antibodies and anti-CD117 antibodies (Figure 6). A cervico-thoraco-abdomino-pelvic tomography scan revealed a tissue mass centered on the palate lateralized to the right, spontaneously hypodense and heterogeneously enhanced after injection of contrast product measuring approximately 73*71*50 mm responsible for lysis with destruction of the hard palate; of the maxillary bone on the right and the dental roots opposite; it infiltrates the ipsilateral maxillary sinus upwards with lysis of its postero-inferior wall and the pterygoid; it thus fills the pterygopalatine fossa and comes into contact with the retro-maxillo-zygomatic space and the pterygoid muscles; it arrives at intimate contact with the tongue below with median raphe in place; it infiltrates the pharyngeal mucosal space and fills the nasopharynx with loss of its straight reliefs (Figure 2,3,4). We note a few sub-millimetre bilateral intraparenchymal pulmonary

micronodules with absence of secondary locations at the abdominopelvic level. A bone scan does not reveal any argument in favor of secondary bone invasion. Tumor that can be classified as cT4bNoMo. The clinical examination reveals a budding mass of the hard and soft palate lateralized to the hard right; fixed measuring 5 cm not bleeding on contact (figure 1) with absence of bilateral lateral cervical lymphadenopathy.

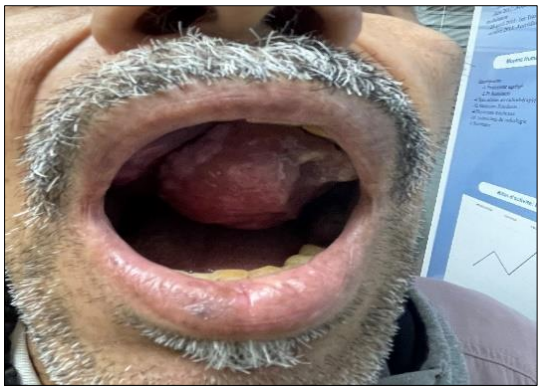

Figure 1: Budding mass of the hard and soft palate lateralized to the hard right

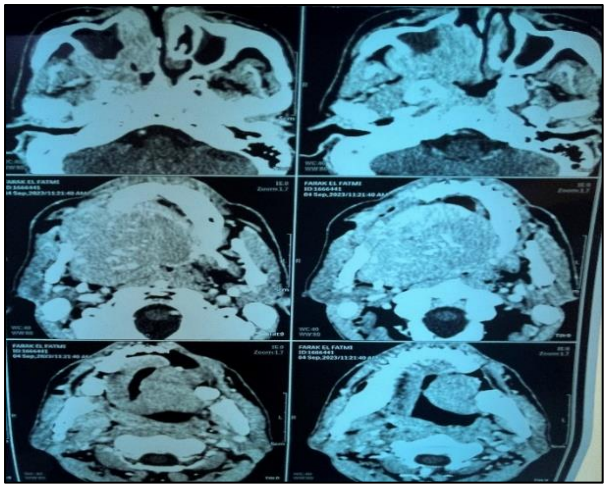

Figure 2: CT: Axial section showing formation of the right oval hard palate.

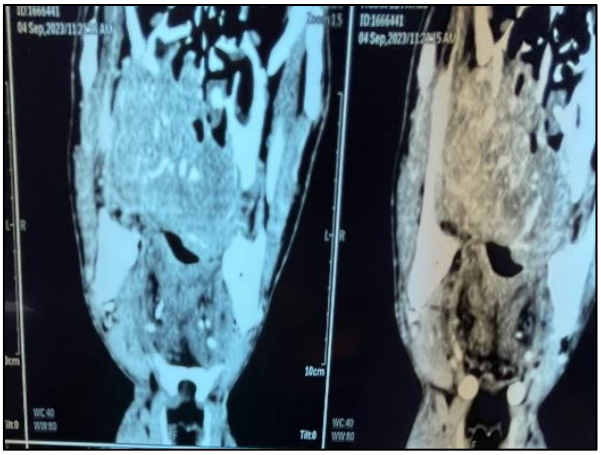

Figure 3: CT: Coronal section showing formation of the right oval hard palate

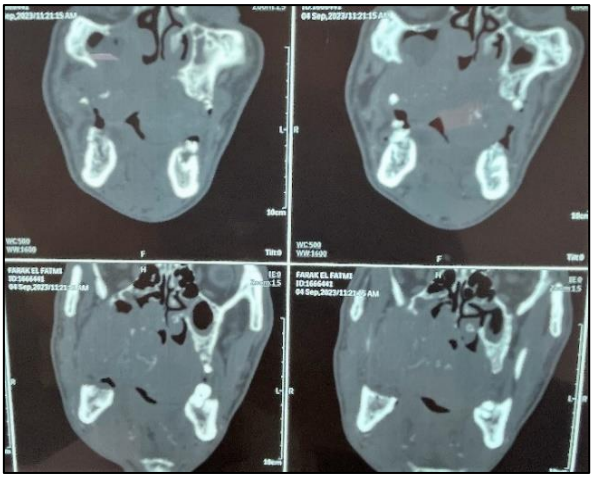

Figure 4: Axial bone window section shows lysis of the maxillary bone

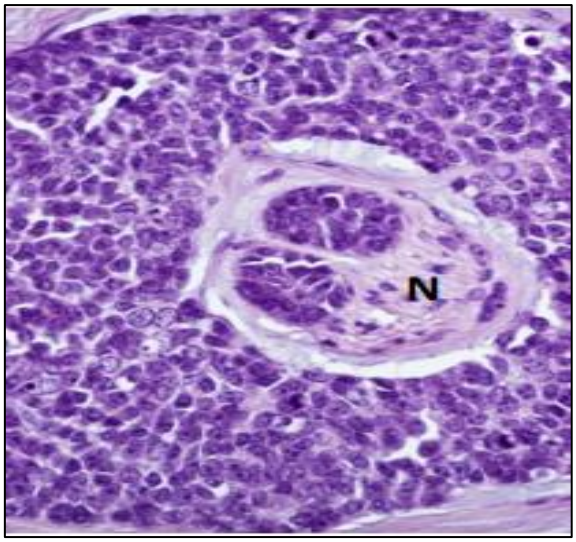

Figure 5: A photomicrograph showing dark cells with scanty basophilic cytoplasm and hyperchromatic and slightly irregular nuclei

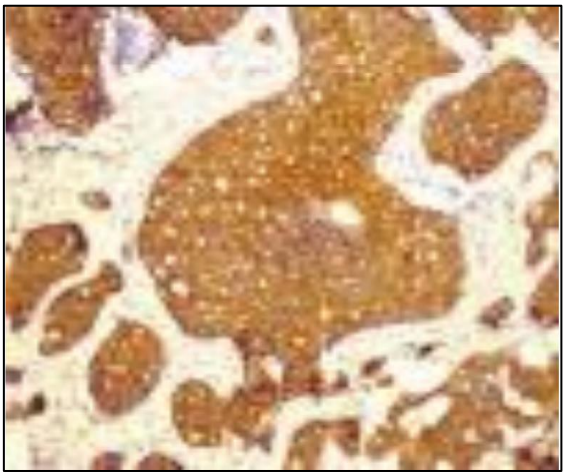

Figure 6: A photomicrograph showing the positive reaction to the CD117 marker (×100) on immunohistochemistry Faced with the inoperability of the tumor; the patient was referred for exclusive radiotherapy.

DISCUSSION

Apart from the main glandular locations (parotid and submandibular), adenoid cystic carcinoma is the most common form of malignant tumor of the palate, representing, according to the authors, 15 to 20% of malignant oral tumors. It can affect the hard palate especially in men and the soft palate especially in women [3], more rarely in the accessory salivary glands of the sinuses or nasal cavity. More exceptionally, intraosseous locations can affect the mandible and would result from glandular inclusions or the malignant transformation of mucosecreting cells contained in certain dentigerous cysts. The age of discovery is between the 4th and 6th decades but it can affect all ages including children with a slight male predominance (3:2) [4]. Slow progression is often responsible for high clinical latency. At the palatal level, a very progressive arch is usual. Above all, pain and paresthesia along the branches of the trigeminus can occur, indicating perineural infiltrations, the frequency of which is one of the characteristics of the complications observed in these tumors [Jaso 2011]. Adenoid cystic carcinoma is a recurrent tumor, it often causes late regional, lymph node and visceral metastases (bones, lungs, brain, kidneys, liver) [3- 5]. The general extension occurs along the nerves and vessels. The treatment recommended as first intention and for curative purposes is surgical excision, with healthy margins, most often followed by adjuvant radiotherapy [6- 8]. This therapeutic choice is only possible under two conditions: the tumor must be resectable, that is to say that an excision with sufficient safety margins is possible on the one hand, and the patient must be operable and able to undergo general anesthesia for several hours, on the other hand. Patients for whom surgical treatment is contraindicated (general condition, comorbidities, unresectable tumor) can nevertheless benefit from treatment with curative intent: the treatment of choice is then exclusive radiotherapy, sometimes boosted by a concomitant chemotherapy. Indeed, although they are not radiocurable (94% recur in the event of irradiation alone), adenoid cystic carcinoma remains a radiosensitive tumor with satisfactory overall survival and local control at 5 years (81% and 76% respectively) [9, 10]. Finally, chemotherapy has no place as first-line treatment in curative care [11]. It must be the first diagnosis to be eliminated in the face of palatal swelling, regardless of the age of the patient. Frequent recurrences and sometimes late metastases justify long-term follow-up of patients.

CONCLUSION

Faced with this type of lesion, a biopsy is essential and must be carried out as soon as possible time limit. The oral surgeon must know the characteristic diagnostic elements as well as the adapted treatment methods, allowing rapid referral of patients to specialized services.

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