

Obstructive Tumor of the Palate in the Old Person: A Case Report

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Abstract

Introduction: Pleomorphic adenoma or mixed salivary gland tumor is a heterogeneous benign tumor of the salivary glands. The most common site is the parotid gland. Its extra-parotid locations, particularly in the accessory salivary glands, are rarer. We report a case of a pleomorphic adenoma of the posterior palate which posed management problems. **Observation:** This is an 85-year-old patient who consulted for a tumor of the posterior palate that had been evolving for 3 years. The examination revealed a globular tumor of the posterior palate extending beyond the midline by approximately 7 cm in long axis, shooting towards the oropharynx and hindering breathing, speech and eating, indicating a life-saving tracheotomy. A CT scan of the facial area revealed a well-circumscribed tumor at the expense of the soft palate, with multiple sites of bone lysis. The biopsy performed was in favor of a pleomorphic adenoma. The patient underwent total surgical excision of a huge tumor on the palate. The aftermath of the operation was marked by a loosening of the sutures with an oronasal fistula requiring the creation of an obturator plate due to the patient's refusal to have another operation. **Conclusion:** Large pleomorphic adenoma of the posterior palate is a rare entity that can cause respiratory problems and surgical difficulties. His prognosis is generally good.

Keywords

Pleomorphic Adenoma, Posterior Palate, Respiratory Disorders, Prognosis, Obturator Plaque

1. Introduction

Pleomorphic adenoma, formerly called mixed tumor of the salivary glands due

to its dual epithelial and connective components, is a benign tumor that develops slowly, quietly, over several years [1].

In most studies, it accounts for 45% - 75% of all salivary gland tumors [2].

The preferred site is the parotid gland. Its extra-parotid locations, particularly in the accessory salivary glands, are rare [3]. They are distinguished from the parotid by their clinical, histological and therapeutic characteristics [3].

Clinically, it is a slow-growing lesion, which presents in the form of a well-defined nodule, firm and painless on palpation, pushing back the mucosa without ulcerating it. The preferred site of the tumor is the palate [1]. Treatment involves total excision of the tumor. Pathological examination confirms the diagnosis [4].

In the literature, the so-called atypical location at the accessory salivary glands does not exceed 9% and the palate constitutes a predilection site for atypical pleomorphic adenoma in 60% of cases [5] [6].

Large forms of pleomorphic adenoma of the palate are rarer [6]. Location in the posterior palate can cause obstruction of the oropharyngeal region with serious respiratory consequences, especially in the elderly. We report a case of a pleomorphic adenoma of the posterior wound which posed management problems.

2. Observation

This was an 85-year-old patient, with no particular pathological history, who consulted for a tumor of the posterior palate that had been evolving for 3 years, slowly increasing in size without pain or deterioration in general condition.

The examination revealed a bumpy tumor, covered with a healthy mucosa, of elastic, soft, painless, globular consistency of the posterior palate extending beyond the midline by approximately 7 cm × 4 cm × 5 cm, fusing towards the oropharynx and hindering breathing, speaking and eating (Figure 1).



Figure 1. Large tumor of the posterior palate.

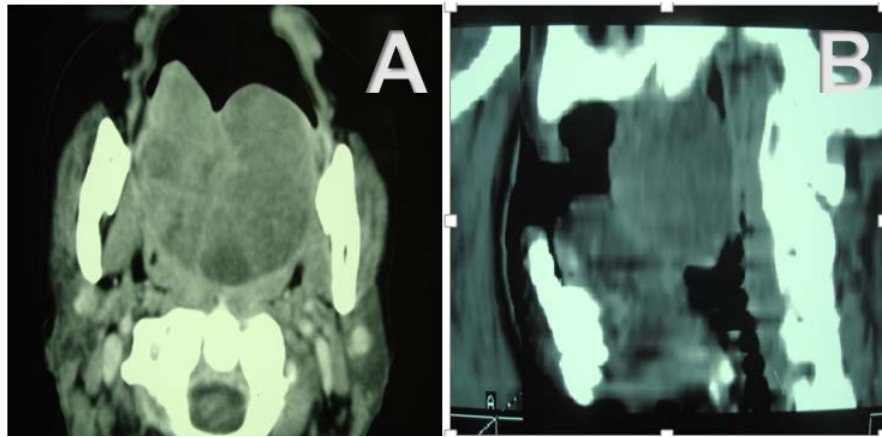


Figure 2. CT scan of the facial area in axial; (A) and sagittal; (B) sections showing a well-circumscribed tumor of the posterior palate with obstruction of the oropharyngeal canal.

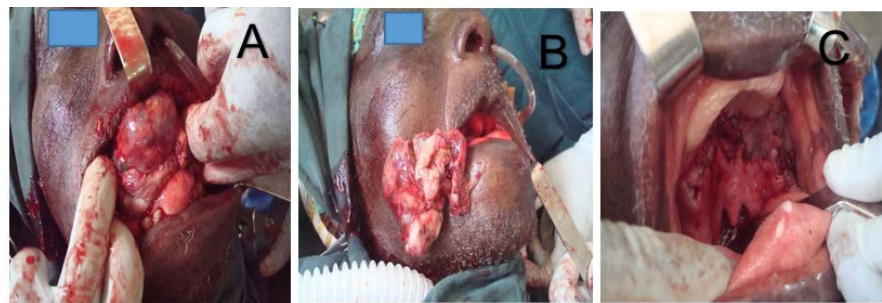


Figure 3. Intraoperative view of the surgical procedure; (A) Removal of the pleomorphic adenoma by oral route; (B) Intraoperative view of the operating room; (C) Intraoperative view of the palate after excision.

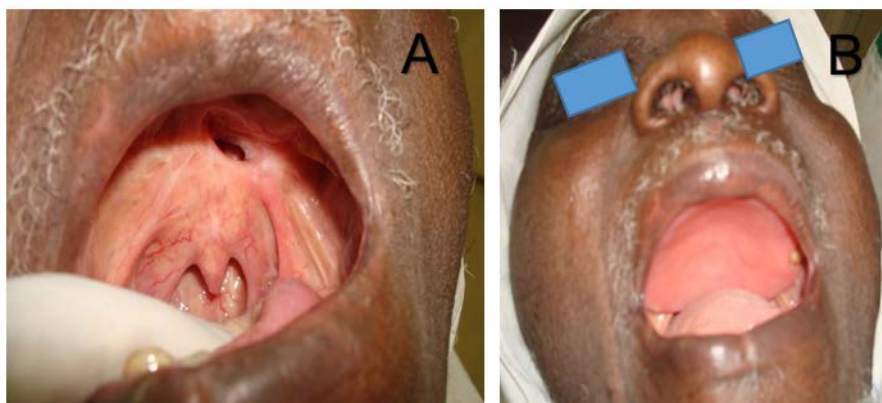


Figure 4. Post-operative results; (A) Residual oronasal fistula; (B) Obturator covering prosthesis.

A CT scan of the facial area revealed an isodense tumor, slightly heterogeneous and well circumscribed at the expense of the soft palate, with multiple sites of bone lysis (**Figure 2**).

A life-saving tracheotomy was performed in the face of respiratory distress. The biopsy performed was in favor of a pleomorphic adenoma. A nasogastric

tube was placed due to feeding difficulties.

We performed complete surgical excision of the mass under general anesthesia via the intraoral route. After a mucosal incision of the soft palate and identification of the cleavage plane, enucleation was performed, removing part of the covering mucosa and without capsular rupture. The postoperative course was marked by suture loosening with oronasal fistula (**Figure 3** and **Figure 4(A)**).

The anatomo-pathological examination of the surgical specimen showed a well-defined nodular lesion, corresponding to a mixed epithelial and mesenchymal proliferation with a thin capsule which showed no breakage. Histological examination confirms the pleomorphic, encapsulated adenoma, the excision of which is complete.

An obturator plate was placed, allowing the problem to be temporarily resolved in the totally edentulous patient (**Figure 4(B)**).

To date, after four years, no recurrence has been reported in this patient.

3. Discussion

Pleomorphic adenoma is the most common heterogeneous benign tumor of the salivary glands, long called mixed tumor of the salivary glands due to its dual epithelial and connective components [1]. They represent 70% to 80% of benign salivary gland tumors and are particularly common in the parotid gland [2]. Its extra-parotid locations are rarer. They are distinguished from the parotid by their clinical, histological and therapeutic characteristics. They are distributed between the submandibular gland and the accessory salivary glands [7].

Indeed, the accessory salivary glands, scattered throughout the upper aerodigestive tracts, can be the site of rare tumors which are reputed to be benign in the majority of cases, mainly in the mucous membrane of the mouth (vault or soft palate, floor of the mouth, cheeks, lips), more rarely of the larynx or nasal cavity. The tumor varieties are numerous. The most common is pleomorphic adenoma which remains a major concern because of its risk of malignant degeneration and which can transform into adenoid cystic carcinoma after a long course [1] [8].

In the present observation, the tumor developed intraorally and was located on the soft palate and progressed towards the oropharynx.

At the level of the palate, this tumor most often affects the lateral part; the midline and the soft tissue are exceptionally affected [2]. The rarity of this location is today highlighted by several authors and our observation illustrates it perfectly. In our patient the severity is linked to its location at the posterior palate with the obstruction of the oropharyngeal airway causing respiratory distress which could have been fatal to the patient.

However, whatever its site, the pleomorphic adenoma usually evolves very slowly and asymptomatic, in the form of a well-limited swelling [2]. Thus, observations of giant pleomorphic adenomas, evolving over several years, have been described particularly in Japan [9]. These giant forms are responsible for an

obstructive upper aero-digestive tract syndrome with dysphagia, dyspnea, snoring and rhinolalia as was the case in our patient. Their complete excision becomes delicate and the risk of recurrence and carcinomatous degeneration becomes great [1] [9].

Imaging was essential whatever the location, in the preoperative assessment of pleomorphic adenoma. It is essentially based on computed tomography and magnetic resonance imaging [1]. It made it possible to evaluate the extension of the tumor in relation to neighboring tissues, to look for bone lysis, to highlight bone erosions and to establish an assessment of local and locoregional extension. They must be carried out before any surgical intervention, especially since the tumor is large [1]. In our patient, imaging did not show bone lysis of the palate but showed obstruction of the upper aero-digestive tract causing respiratory distress.

The diagnosis of pleomorphic adenoma is based on both tissue sampling and radiographic studies. Tissue sampling procedures including fine needle aspiration (FNA) and tissue or needle biopsy can be performed on an outpatient basis. These procedures are associated with very low tumor seeding rates [10] [11].

In the reported case, the biopsy taken before the surgical procedure, followed by a pathological examination, confirmed the diagnosis of pleomorphic adenoma. Surgical excision, carried out in a second stage, was carried out intraorally, allowing excision of the tumor in one piece without capsular breakage with distant margins [1]. The examination concluded with the histological confirmation of an isolated pleomorphic adenoma whose excision was complete.

Pleomorphic adenomas have a low risk of malignant transformation. The malignant potential is proportional to the time during which the lesion is in situ (1.5% in the first five years, 9.5% after 15 years). Other risk factors for malignancy include older age, radiation therapy, large size, and recurrent tumors.

Histologically, it is appropriate to differentiate pleomorphic adenoma carcinoma from adenoid cystic carcinoma [12]. However, the association of pleomorphic adenoma with carcinoma is exceptional [13].

Excision is therefore justified in almost all cases. A margin of five millimeters must be obtained. These tumors do not invade the periosteum [2]. It is therefore not necessary to resect the bone. When tumor bed recurrences occur, they present significant resistance to treatment, with management options including surveillance and surgery only.

Our observation perfectly illustrates this extremely rare case by the association of three factors of poor prognosis of this condition in the patient, notably advanced age, posterior site and a fairly long course (3 years).

To date, after a 4-year follow-up, no recurrence has been reported in this patient.

4. Conclusion

True benign tumors of the salivary glands can have serious consequences due to

their location in the oropharyngeal region. In the elderly, the situation is even more pejorative, hence the need for diligence in interventions. Large pleomorphic adenoma of the posterior palate is a rare entity that can cause respiratory problems and surgical difficulties. His prognosis is generally good.

Ethical Considerations

The study patient had given informed consent and anonymity was an obligation. The confidentiality of the patient's clinical and paraclinical data was respected.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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