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PLEOMORPHIC ADENOMA OF ACCESSORY SALIVARY GLANDS

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SUMMARY

Pleomorphic adenoma is the most common variety of benign tumors of the accessory salivary glands. The aim of this work is an epidemiological, clinical and therapeutic analysis of this tumor. Material and methods: We report through a retrospective descriptive study 20 cases of pleomorphic adenomas of the accessory salivary glands over a period of 4 years (2020 to 2024). Results: There were 40% men and 60% women with an average age of 35.8 years. In 10 cases, the site of these adenomas was the bony palate, in 6 cases at the upper lip, in 4 cases at the inner side of the cheek. Swelling was the clinical manifestation observed in all cases. CT was performed in all cases. Treatment was surgical in all Case. Histology confirmed the diagnosis of pleomorphic adenoma. It was benign in all cases. Recurrence was not observed over a follow-up of 2 years and 5 months.

KEYWORDS: Histology confirmed the diagnosis of pleomorphic adenoma

INTRODUCTION

Tumors of the accessory salivary glands are rare and are benign in the majority of cases. Pleomorphic adenoma is the most frequently found histological type. It poses a major problem for any surgeon because of its risk of malignant degeneration.

Goals

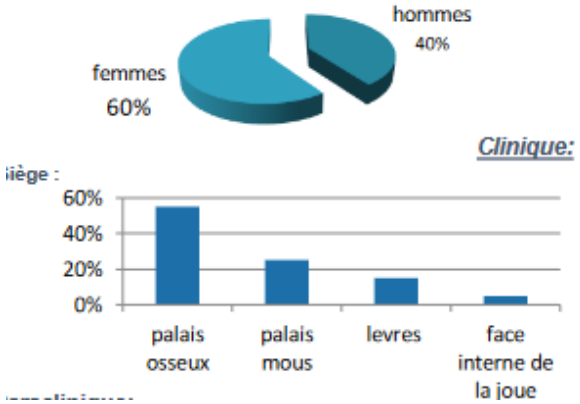
The objective of our work is to clarify the epidemiological, diagnostic and therapeutic particularities of these tumors as well as their evolving characteristics.

MATERIALS AND METHODS

This is a retrospective study carried out by the Maxillo-Facial Surgery department of Rabat University Hospital, over a period of 4 years (April 2020 to April 2024). We treated 20 patients with pleomorphic adenoma of the accessory salivary glands. Data collection was via operating sheets. Data entry was carried out using SPSS 20.0 software. Data analysis was done with the same software: Quantitative variables were expressed as mean ± standard deviation and qualitative variables as percentage.

RESULTS

Epidemiological data: There are 20 patients distributed like this: men 40% women 60% The average age of our patients is 35.8 years.



10 cases involved a tumor of the hard palate, their average age was 49 years with a female predominance. These people had consulted for a palatal swelling (fig. 1) with an average diameter of 4 cm, indurated, painless, well limited, covered by a normal mucosa with an average progression time of 7.6 years. The rest of the ENT and head and neck clinical examination was completely normal. The CT scan concluded in the majority of cases to be a tumor process of the palate of homogeneous tissue density with clear and regular boundaries and moderate enhancement by the contrast product (fig2) Magnetic resonance imaging showed a T1 hyposignal and an intense T2 hypersignal, after gadolinium injection, and enhancement Moderate signal in the periphery. In 6 women whose average age was 30 years, the location was at the level of the upper lip (fig 3) which manifested itself as a nodule, hard, well defined

and closer to the mucous membrane than to the skin late on. yousure. The location on the inner side of the cheek was in 4 cases it was a swelling lined with a healthy-looking mucous membrane with an average size of 3.2 cm, often well limited and painless (fig4). average discovery was 4.5 months. We performed surgical excision of these masses under general anesthesia via the intraoral route. The pathological examination confirmed the diagnosis of pleomorphic adenoma: benign and encapsulated in all cases. Recurrence was not observed over a follow-up of 2 years and 5 months.

Fig. 1: pleomorphic adenoma of the hard palate.

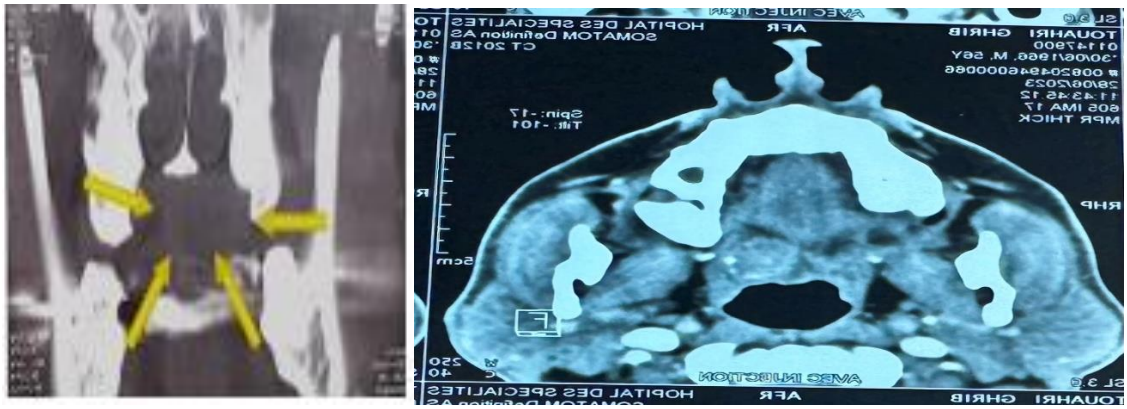
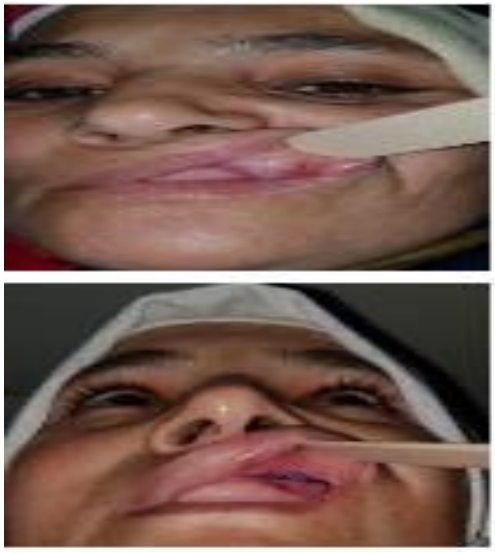


Fig. 2: Axial and coronal maxillofacial CT sections showing a Tissue process, well limited to the soft palate.



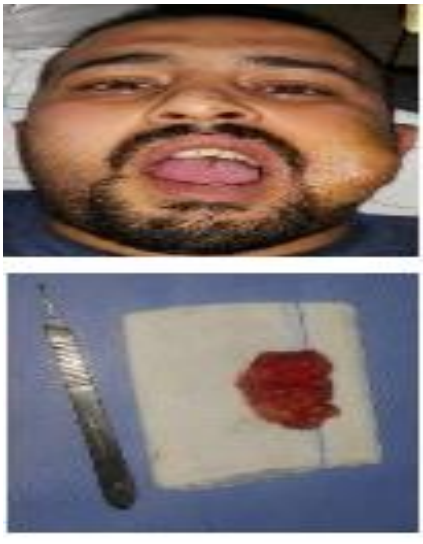


Fig. 3: pleomorphic adenoma of the upper lip . Fig. 4: pleomorphic adenoma of the inner side of the cheek.

DISCUSSION

Accessory salivary gland tumors represent 15% to 20% of salivary gland tumors.[1, 2] Pleomorphic adenoma is the most common tumor (50%) of the main and accessory salivary glands.[3] Approximately, 80% of PAs develop in the parotid, 8% in the submandibular gland and 7% in the GSA. It represents the most common histological type (70.6 to 100%) of benign tumors of the accessory salivary glands with a predilection site in the palate.[4] PA of GSA affects women more often than men with varying ratios according to different studies 1/1.1[5] and 1/3.2.[6] In our series, the sex ratio was 0.64. The preferential age of onset of AP varies between 30 and 40 years.[7] It was 36 years for our patients.

The clinical symptoms depend on the size and location of the tumor.[8] In the oral cavity, a painless swelling developing under a normal mucosa is often described.[9] The PA of the palate is often posterolateral, clamped between the bony vault and the thick, healthy fibromucosa. PA of the lips manifests itself as a nodule, hard, well defined and closer to the mucosa than to the late arched skin. In most cases, as in ours, the clinical symptoms are poor because these benign tumors are slow growing and are only discovered when they become large.

The appearance on MRI depends on the cellular and myxoid composition of the tumor. This tumor is often lobulated, well defined, with T1 hyposignal and T2 hypersignal, enhancing homogeneously after injection of contrast product.[11]

Needle aspiration cytology often provides a rapid and reliable diagnosis for a trained cytopathologist. The sensitivity varies from 73 to 93% and the specificity from 85 to 98% depending on the series.[12] There is also an economic benefit, with a low cost, and a reduction in the number of surgical interventions if this examination reassures the surgeon in a diagnosis of benignity.

At the clinical stage, the differential diagnosis arises with all benign tumors of the oral mucosa having a nodular appearance.

- connective tumors: fibroma; lipoma; myxoma
- dysembryoplasia tumors: ectopic thyroid nodule; thyroglossal tract cyst; dermoid and epidermoid cysts; lymphoepithelial cyst;
- muscle tumors: leiomyomas; rhabdomyoma;
- nerve tumors: schwannomas; neuroma; amputation neuroma; Abrikossof tumor.

Macroscopically, the tumor is nodular, well circumscribed or even encapsulated by a connective matrix, it is usually whitish gray in color, in places translucent when cut. Its consistency is variable, firm or soft and gelatinous. The pleomorphic character refers to a great architectural richness contrasting with the monomorphism of the epithelial and myoepithelial cells which compose it. These are in fact most often regular and "reassuring" cytologically. One of the important elements of the diagnosis is the observation of a particular stroma which, very characteristically, takes on a myxoid appearance, sometimes with cartilaginous or bony differentiation.[13]

Histologically, pleomorphic adenoma is characterized by cellular polymorphism with the presence of myoepithelial, epithelial and stromal cells, hence the name mixed tumor.[14] In the oral cavity, this tumor has the particularity of not being encapsulated and the contact of tumor cells with adipose or muscle cells should not be an issue for an infiltrating carcinoma.[15]

The treatment is essentially surgical. Indeed, whatever the site, excision of the PA must in principle be carried out remotely; enucleation is not a more suitable surgical procedure at this level. Any direct incision with lifting of the mucosal flap, in order to allow suture at the end of the procedure, should also be avoided given the risk of leaving some tumor islands in the thickness of the mucosa. Consequently, excision of the tumor requires the deliberate sacrifice of the mucosal covering in order to avoid recurrence which depends on the site and the quality of tumor excision.[16] The literature reports a frequency of 2.4 to 10%.[17] The incidence of malignant transformation or carcinoma ex-pleomorphic adenoma (CXAP) is rare. It occurs in less than 7% of PAs on GSA, mainly in the palate.[18] The risk of transformation often increases with the frequency of recurrences and the delay in diagnosis, varying from 1.6% before 5 years to 9.4% after 15 years.[19]

Recent increase in size, ulceration, infiltration and spontaneous bleeding are signs in favor of malignant transformation. The analysis of the surgical specimen must be rigorous because the malignant component can be very minimal. The degenerated epithelial component most often corresponds to an adenocarcinoma or undifferentiated carcinoma. We speak of a metastasizing pleomorphic adenoma when compared to a pleomorphic adenoma with a completely benign histological appearance but which is accompanied by locoregional or distant dissemination. This dissemination appears to be secondary to multiple recurrences and/or repeated surgical interventions which allow the tumor to access the venous vascular network.[20] These secondary locations, generally bone, lung and lymph node, occur up to 55 years after the initial pleomorphic adenoma. Carcinoma ex-(on)pleomorphic adenoma is a carcinoma occurring on a pre-existing pleomorphic adenoma. All histological types of carcinomas can be observed.[21] This is a difficult diagnosis, especially during an extemporaneous examination, because the malignant component can be very minimal. This problem inherent to sampling means that a large number of samples must be taken for definitive histological examination, so as not to overlook a transformed focus.

CONCLUSION

Pleomorphic adenoma is a heterogeneous benign tumor of the salivary glands; its extra-parotid locations are rare. Its progressive and invasive nature in the event of surgical abstention, its tendency to locoregional recurrence. Requires systematic tumor excision with a margin of 5 mm of healthy tissue with prolonged and rigorous monitoring.

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