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Original Research Paper

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MANAGEMENT OF PLEOMORPHIC ADENOMA OF MINOR SALIVARY GLAND ABOUT 20 CASES AND REVIEW OF LITERATURE.

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ABSTRACT Tumors of the accessory salivary glands are rare, and they are benign in most cases. Pleomorphic adenoma is the most frequently found histological type. It poses a major concern for any surgeon because of its risk of malignant degeneration. The objective of our work is to specify the epidemiological, diagnostic, and therapeutic characteristics of these tumors as well as their evolutionary characteristics.

KEYWORDS : minor salivary gland tumor, pleomorphic adenoma, management

INTRODUCTION:

The accessory or minor salivary glands (GSA) or still so-called intrinsic salivary glands - as opposed to the main or major or extrinsic salivary glands that are the parotids, submandibular and sublingual - are represented by a multitude of very small functional units distributed in almost all the oral mucous membranes. Experience shows that these small salivary structures, at the origin of many benign and especially malignant lesions, seem to be poorly understood. Tumors of the latter (GSA) are rare and considered to be benign in most cases. However, their leader which is pleomorphic adenoma (PA) remains a major concern for any surgeon because of its risk of malignant degeneration. it seemed wise to us to assess the quality of our care through a retrospective study.

MATERIALS AND METHODS:

This is a retrospective study carried out by the Maxillofacial Surgery and ENT departments of Rabat University Hospital, over a period of 3 years (December 2015 to December 2018). we treated 20 patients with pleomorphic adenoma of the accessory salivary glands. Data collection was via exploitation sheets, Data entry was carried out on SPSS 20 .0 software. Data analysis was carried out with the same software: The quantitative variables were expressed as mean ± deviation -type and qualitative variables in percentage.

RESULTS:

These are 20 patients treated in our training, the average age of our patients is 35.8 years, the predominance of women at a rate of 60% women and 40% men.

58% of the patients had a location in the bony palate, 22% in the soft palate, 18% in the lips and 2% in the internal face of the cheek.

The clinical presentation was generally common, it was a swelling lined with a healthy-looking mucosa with an average size of 3.2cm, often quite limited and painless (figure 1.2.3).

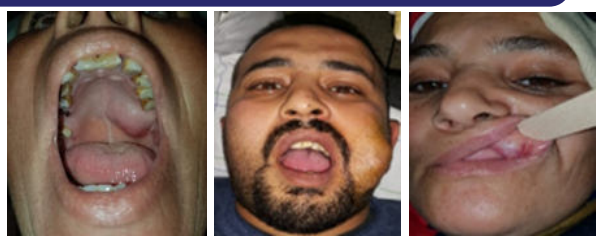

Figure 1,2,3: Pleomorphic adenoma of the cheek, hard palate, and upper lip

The remainder of the ENT and cervicofacial clinical examination was completely normal, the paraclinical assessment was supplemented by imaging, the scanner performed concluded in the majority of cases in a tumor process of the palate of homogeneous tissue density with clear and regular limits and a moderate enhancement by the contrast product. Magnetic resonance imaging revealed an intense T1 hypointense and intense T2 hypersignal, after injection of gadolinium, and a moderate enhancement of the signal at the periphery (figure 4.5,6).

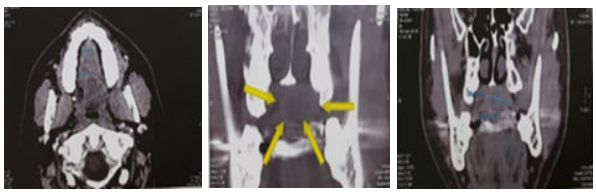

Figure 4,5,6: CT scan Axial and Coronal cuts showing a well-circumscribed mass of soft palate.

We performed surgical excision of these masses under endo-oral anesthesia. Pathological examination confirmed the diagnosis of pleomorphic adenoma: benign and encapsulated in all cases except one case of degeneration. Recurrence was not observed after 2 years and 5 months. (fig 7.8)

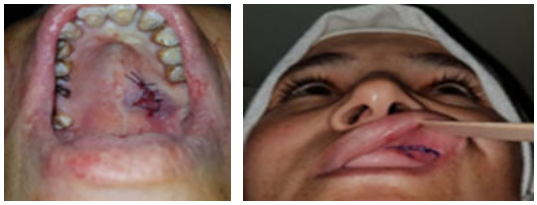

Figure 7, 8: images of patients after excision of PA

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 at the parotid level, 8% at the submandibular gland level, and 7% at the GSA level. It represents the most frequent histological type (70.6 to 100%) of benign accessory salivary gland tumors with a predilection site in the palate [4]. PA of GSA affects women more often than men with variable ratios according to the different studies 1 / 1.1 [5] and 1 / 3.2.

Clinical symptoms depend on the size and location of the tumor. In the oral cavity, a painless swelling developing under normal mucosa is often described [7,8]. PA of the palate is often posterolateral, clamped between the bony vault and the thick and healthy fibro mucosa, the malignant tumor deforms the "watch glass" region. PA of the soft palate manifests as a nodule embedded in the hemi voile. Sometimes the nodule deflects the uvula or takes up the thickness of the anterior pillar of the tonsil. PA of the lips is manifested by a hard, well-defined nodule that is closer to the mucous membrane than to the late arched skin. In most cases, as in ours, the clinical symptomatology is poor because these benign tumors are slow growing and are not discovered until they become large.

The appearance on MRI depends on the cell and myxoid composition of the tumor. This tumor is often lobulated, well limited, in T1 hypersignal and T2 hypersignal, which is evenly enhanced after injection of contrast product [9]. Fine needle aspiration is often a rapid and reliable diagnosis for a trained pathologist. The sensitivity varies from 73 to 93% and the specificity from 85 to 98% depending on the series [20]. There is also an economic benefit, with a low cost, and a reduction in the number of surgeries if this examination confirms the surgeon in a diagnosis of benignity. The preoperative diagnosis would thus allow a saving of 25% per patient treated for a nodule of the salivary glands [10]. The intraoperative examination, although it is very controversial in Anglo-Saxon countries, retains its place in the management of salivary gland tumors. Indeed, with a sensitivity of 74%, a specificity of 99%, a false negative rate of 3.5% and a false positive rate of 0.83%, the extemporaneous examination is a reliable technique for differentiating tumors. malignant from benign when a preoperative diagnosis could not be made.

However, the diagnosis of a histological subtype is sometimes more hazardous, given the great architectural polymorphism of salivary gland tumors. The extemporaneous examination also retains its interest for the analysis of the operating margins [11]. At the clinical stage, the differential diagnosis arises with all benign tumors of the oral mucosa having a nodular appearance: conjunctive tumors (fibroma; lipoma; myxoma), dysembryoplastic tumors (ectopic thyroid nodule; cyst of the thyroglossal tract; dermoid and epidermoid cysts; lymphoepithelial cyst), muscle tumors (leiomyomas; rhabdomyoma), nerve tumors (schwannomas; neuroma; amputation neuroma; Abrikossoff's tumor).

Macroscopically, the tumor is nodular, well circumscribed, or even encapsulated by a conjunctive 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 that compose it. These are in fact most often regular and "reassuring" on the cytological level. An important part of the diagnosis is the observation of a particular stroma which very characteristically takes on a myxoid appearance, sometimes with cartilage or bone differentiation [13, 14]. Very cellular sectors are sometimes observed (this is referred to as "cellular pleomorphic adenoma"). A capsule is most often observed, except sometimes in pleomorphic adenomas whose stroma is mainly mucoid or in oral or nasal locations.

The treatment is mainly surgical. Indeed, whatever the site, the excision of the PA should in principle be carried out remotely, an enucleation is not a more suitable surgical procedure at this level.

Any direct incision with removal of a mucous flap, to allow suturing at the end of the operation, should also be avoided given the risk of leaving a few tumor islands in the thickness of the mucosa. Therefore, tumor excision requires the deliberate sacrifice of the mucous lining to avoid recurrence which depends on the site and the quality of tumor excision [15]. The literature reports a frequency of 2.4 to 10% [16]. The incidence of malignant transformation or carcinoma ex-pleomorphic adenoma (CXAP) is rare. It occurs in less than 7% of PAs on GSA, mainly located in the palate [15]. 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 [17]. The recent increase in height, ulceration, infiltration, and spontaneous bleeding are signs in favor of a malignant transformation. Analysis of the surgical specimen must be rigorous because the malignant component may be very minimal [18]. The degenerate epithelial component most often corresponds to an adenocarcinoma or an undifferentiated carcinoma. We speak of a metastasizing pleomorphic adenoma in front of a pleomorphic adenoma with a completely benign histological appearance, but which is accompanied by locoregional or distant dissemination. This spread appears to be secondary to multiple recurrences and / or repeated surgical interventions which allow the tumor to access the venous vascular network [19]. These secondary locations, usually bony, pulmonary, and ganglionic, occur up to 55 years after the initial pleomorphic adenoma [13, 14]. Carcinoma ex-(over) pleomorphic adenoma is a carcinoma occurring on a pre-existing pleomorphic adenoma. All histological types of carcinoma can be observed [19,20,21].

CONCLUSION:

Treatment remains satisfactory overall if it responds to the strategy articulated on the evocation of PA of ASGs in front of any tumor formation of the oral cavity developed under a healthy mucosa; the proscription of the biopsy; systematic tumor excision with a 5 mm margin of healthy tissue and monitoring which is prolonged and rigorous.

Conflict of interest:

The authors declare no conflict of interest.

REFERENCES:

[1] Varghese BT, Sebastian P, Abraham EK, Mathews A. Pleomorphic adenoma of minor salivary gland in the parapharyngeal. World J Surg Oncol 2003;1(1):2.
[2] Becelli R, Frati R, Cerulli G, Perugini M, Frati A, Lannetti G. Pleomorphic adenoma of the minor salivary glands of the palate. J Exp Clin Cancer Res 2001;20(1):25-8.
[3] Clauser L, Mandrioli S, Dallera V, Sarti E, Galie M, Cavazzini L. Pleomorphic adenoma of the palate, J Craniofac Surg 2004;15(6):1026-9.
[4] Toida M, et al. Intraoral minor salivary gland tumors: a clinicopathological study of 82 cases. Int J Oral Maxillofac Surg 2005;34(5):528-32.
[5] Eveson JW, Cawson RA. Tumours of the minor (oropharyngeal) salivary glands: a demographic study of 336 cases. J Oral Pathol 1985;14(6):500-9.
[6] Isacsson G, Shear M. Intraoral salivary gland tumors: a retrospective study of 201 cases. J Oral Pathol 1983;12:57-62.

[7] Pires FR, Pringle GA, Almeida OP, Chen SY. Intra-oral minor salivary gland tumors: A clinicopathological study of 546 cases. Oral Oncol 2007;43:463-70.
[8] Arsheed H, Biswajyoti H, Sultan A P, Rajan K. Primary pleomorphic adenoma of minor salivary gland in the parapharyngeal space. World J Surg Oncol 2009;7:85.
[9] Bullerdiek J, Wobst G, Meyer-Bolte K, Chilla R. Cytogenetic subtyping of 220 salivary gland pleomorphic adenomas. Cancer Genet Cytogenet 1993;65:27-31.
[10] Baglin AC, Wassef M. Cytoponction des glandes salivaires : le pour et le contre. Ann Pathol 2007;27:1S78-11S.
[11] Layfield LJ, Gopez E, Hirschowitz S. Cost efficiency analysis for fine-needle aspiration in the workup of parotid and submandibular gland nodules. Diagn Cytopathol 2006;34:734-8.
[13] Barnes L, et al. World Health Organization classification of tumours. Pathology and genetics of head and neck tumours. Lyon: IARC Press, 2005.
[14] Ellis GL, Auclair PL. Atlas of tumor pathology. Third series, fascicle 17. Tumors of the salivary glands. Washington: Armed forces institute of pathology, 1996.
[15] Bardwill JM, Reynolds CT, Ibanez ML, Luna MA. Report of 100 tumors of minor salivary glands. Am J Surg 1966;112(4):493-7
[16] Alper C, Fatih C, Aylar P, Sabri U. Pleomorphic adenoma of the nasal columella. Pathol Res Pract 2008;204:273-6. [32] Akan H, Yildiz L, Unal R. Carcinoma ex pleomorphic adenoma of the minor salivary gland with pulmonarymetastasis. Diagn Interv Radiol 2008;14(1):3-5.
[17] McNamara ZJ, Batstone M, Farah SC. Carcinoma ex pleomorphic adenoma in a minor salivary gland of the upper lip. Oral Surg Oral Med Oral Pathol Oral Radiol Endod 2009;108(5):e51-e53.
[18] Just P-A, Miranda L, Elouaret Y, Meatchi T, Hans S, Badoual C. Classification des tumeurs des glandes salivaires. Ann Otolaryngol Chir Cervicofac 2008;125:331-40.
[19] Steele NP, Wenig BM, Sessions RB. A case of pleomorphic adenoma of the parotid gland metastasizing to a mediastinal lymph node. Am J Otolaryngol 2007;28(2):130-3.
[20] Altemani A, Martins MT, Freitas L, Soares F, Araújo NS, Araújo VC. Carcinoma ex pleomorphic adenoma (CXPA): immunoprofile of the cells involved in carcinomatous progression. Histopathology 2005;46:635-41.
[21] M. Naeem , S. Shahmeer , S. A Hussain Zaidi. Pleomorphic adenoma of minor salivary gland. J Ayub Med Coll Abbottabad. Jul-Sep 2016;28(3):620-622.