

Lacrimal Pleomorphic Adenoma: A Rare Topography

Mamadou Diouldé 1 KANTÉ^{1,4*}, Abdoulaye Sadio DIALLO², Abdoulaye KEITA², Thierno Amadou Tely DIALLO³, Abdou Magib GAYE²

¹Department of Dermatology and Venereology, Donka National Hospital, Conakry, Guinea

²Laboratory of Pathological Anatomy and Cytology, Cheick Anta Diop University of Dakar, Senegal

³General Surgery Department, Kédougou Regional Hospital, Senegal

⁴Faculty of Health Sciences and Technology, Gamal Abdel Nasser University of Conakry, Guinea

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*Corresponding author: Mamadou Diouldé 1 KANTÉ

Department of Dermatology and Venereology, Donka National Hospital, Conakry, Guinea

Abstract

Case Report

Pleomorphic adenoma is a benign epithelial and mesenchymal tumor formation. It is usually located in the main salivary glands, but rarely in other sites, particularly in the ectopic lacrimal gland. We report an exceptional case of a pleomorphic adenoma of the ectopic lacrimal gland at the level of the root of the nose diagnosed by histology.

Keywords: Pleomorphic Adenoma, Ectopic Lacrimal Gland.

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INTRODUCTION

Pleomorphic adenoma is a benign, mixed tumor described by BROCA in 1866 having a heterogeneous appearance generally composed of two tissues of different nature (epithelial and mesenchymal) [1–3]. It is located mainly in the parotid gland. Extra-parotid localizations are possible but rare [4]. Localization in the ectopic lacrimal gland is exceptional [5]. We report a case of ectopic frontal lacrimal pleomorphic adenoma located on the procerus muscle of the root of the nose.

OBSERVATION

A 50-year-old woman with no particular pathological history consulted for an unsightly painless facial swelling. The clinical examination found a tumor located at the root of the nose, oval, soft, mobile, not adhering to the deep plane. This tumor measured approximately 2.5 cm in diameter and was not ulcerated (Image 1). The ophthalmological examination was normal. The biological parameters evaluated were without particularities.

The ultrasound scan performed had objectified the presence of a tissue echostructure image not dependent on the bone with the absence of lipoma and cyst. The CT scan had not been performed. An excisional biopsy had been considered. This biopsy performed which had highlighted a rounded tumor measuring 3 x 2.5 x 2 cm of whitish gray color with a smooth external

surface encapsulated with slices of homogeneous whitish section with fibromyxoid changes. On Hematoxylin-eosin (HE) staining, it had highlighted a benign tumor proliferation with a dual epithelial and connective tissue component. The epithelial tissue consisted of fairly monomorphic, non-atypical cubocylindrical cells with low-grade ovoid nuclei. These cells were organized into slightly cribriform masses with ductal differentiation. The connective tissue component consisted of a fibromyxoid area with cartilaginous metaplasia constituting small lobules (Image 2). The elements mentioned are typical of a pleomorphic adenoma, thus the diagnosis of an ectopic pleomorphic adenoma of the lacrimal glands of the root of the nose on the procerus muscle was retained. Immunohistochemistry had not been performed.

Postoperative care consisted of antibiotic therapy combined with analgesic and local care. The postoperative course was uneventful. After 6 months, no recurrence was found.

DISCUSSION

The lacrimal gland develops from the basal conjunctival cells as solid buds at two months of gestation. After migration, these buds eventually lodge in the lacrimal gland fossa. Its ectopia is very rarely reported and the clinical presentation varies depending on the location and underlying histopathology [6]. Ectopia is described within the eyelids, in the orbit, on

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the adnexa and in the eyeball [3]. In our patient, this location was at the level of the root of the nose between the two eyeballs on the procerus muscle. This topography is exceptional.

Pleomorphic adenoma usually presents as a painless, slow-growing mass and is often found in the 4th or 5th decade of life. It is more common in women than in men [6]. Macroscopically, the tumor is well circumscribed, nodular or even encapsulated, it is usually whitish gray in color, translucent in places when cut. Its consistency is variable, firm or soft and gelatinous [4], as in our patient.

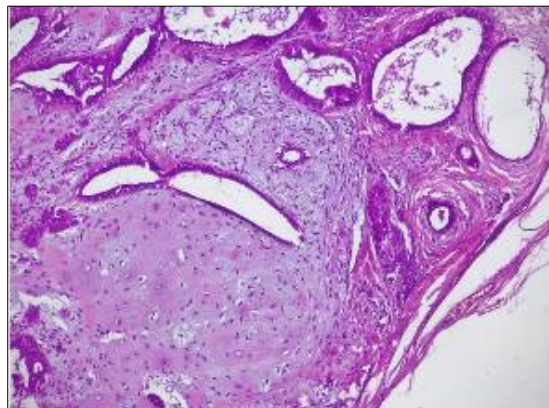
The tumor is usually characterized by cellular polymorphism with the presence of myoepithelial, epithelial and stromal cells, hence the name mixed tumor [7]. Our patient, age 50, was also remarkable.

CONCLUSION

Pleomorphic adenoma is a benign tumor often developed at the expense of the parotid gland. Localization in the lacrimal gland is possible but exceptional especially on the procerus muscle between the eyeballs.



Picture 1: Frontal tumor of soft consistency, painless, not adhering to the deep plane



Picture 2: Heterogeneous epithelial and connective tissue tumor proliferation with chondroid differentiation (HE x 100)

Statement of Interest: The authors declare that they have no conflicts of interest concerning this article.

REFERENCES

1. Souley, A. S. Y., Laaribi, N., Ouattassi, N. E., Alsubari, A., Elasri, F., Reda, K., & Oubaaz, A. (2020). ADENOME PLEOMORPHE DES GLANDES LACRYMALES: DIFFICULTES DIAGNOSTIQUES A PROPOS D'UN CAS. *Journal de la Société Marocaine d'Ophtalmologie*, (29), 63-64.
2. Debnath, S. C., & Adhyapok, A. K. (2010). Pleomorphic adenoma (benign mixed tumour) of the

- minor salivary glands of the upper lip. *Journal of maxillofacial and oral surgery*, 9, 205-208.
3. Sharma, A. K., Sharma, R., Misra, S., Misra, N., Ashik, R., Hussain, N., ... & Singh, P. R. (2022). Pleomorphic adenoma of the orbital ectopic lacrimal gland: an extremely rare occurrence with review of literature. *Neurology India*, 70(1), 296-299.
4. MOUKRAM, K., EL BOUHAIRI, M., & YAHYA, I. B. (2017). Les localisations rares de l'adénome pléomorphe: à propos de quatre cas cliniques. *Actualités Odonto-Stomatologiques*, (285), 5.
5. Diallo, O. (2011). ADENOME PLEOMORPHE DE LA GLANDE LACRYMALE RESPONSABLE D'UNE EXOPHTALMIE DOULOUREUSE: A PROPOS D'UN CAS. *JOURNAL DE NEUROCHIRURGIE*, 7(2), 20-21.
6. Wajda, B. N., Mancini, R., Evers, B., & Nick Hogan, R. (2019). A rare case of atypical pleomorphic adenoma arising from periocular ectopic lacrimal gland. *International Ophthalmology*, 39, 1617-1619.
7. Mathew, P. T., & Fang, F. (2018). Advances in molecular electronics: a brief review. *Engineering*, 4(6), 760-771.