

A Nasal Localization of Abrikossof Tumor Observed to Yaounde Reference Hospital

Yves Christian Andjock Nkougou^{1,2*}, Antoine Bola Siafa^{1,3}, David Mindja Eko^{1,4}, Winnie Anoumedem¹, Francois Djomou^{1,3}, Richard Njock^{1,5}

¹Department of ENT-Ophthalmology-Stomatology, Faculty of Medicine and Biomedical Sciences, University of Yaoundé I-Cameroon, Yaounde, Cameroon

²ENT-Service, Yaounde General Hospital-Cameroon, Yaounde, Cameroon

³ENT-Service, Yaounde Teaching Hospital-Cameroon, Yaounde, Cameroon

⁴ENT-Service, Yaounde Central Hospital-Cameroon, Yaounde, Cameroon

⁵ENT-Service, Douala General Hospital-Cameroon, Douala, Cameroon

Email: *andjock_nkougou@hotmail.fr

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Abstract

Background/Aim: Abrikossof's tumor or granular cell tumor is a rare tumor. The cervicofacial localization is the most common. The aim of this report case was to show a rare case of nasal localization, to the 48-year old patient, treated in poor medical condition. **Case presentation:** The patient consults late with enormous nasal mass involving for five years. After biopsy and facial CT-scan, a surgical procedure was performed. The evolution was good and the final pathology confirms the diagnosis. The objective of this case report was to show the originality of the presentation and the difficulties for management in poor medical environment. **Conclusion:** Abrikossof's tumor is a rare benign tumor but whose preferential development occurs at the expense of the ENT sphere. Large forms remain the preserve of poor environments. The diagnosis is pathological and the treatment is surgical.

Keywords

Abrikossof Tumor, Nasal Cavity, Yaounde

1. Introduction

Abrikossof's tumor or granular cell tumor is a rare tumor, is a nodular benign tumor. The first description was a tongue description on 1929 by Abrikossof [1]. Any part of the body can be affected, but the most localized is cervicofacial (45% - 65%) [2]. The main facial localization is intra-oral, lips and parotid gland (70%). A case of nasal localization is rarely found in the literature.

It is more common in black people and mainly women are affected.

The anatomopathological examination confirms the diagnosis. We can observe the possibility of local recurrences. The treatment is surgical and guarantees a good evolution.

The interest of this case report is the nasal localization that is rare. The authors also present the difficulties of management in our environment.

2. Observation

This is a 48-year old patient, with no history of alcohol-smoking. He consulted in our department for a large mass evolving for 5 years. The clinical presentation was dominated by an obstructive nasal syndrome (nasal obstruction and hyposmia) without epistaxis.

On physical examination, we had a facial deformity with a large right nasal mass. The mass extended from the nasal pyramid to the philtrum; It invaded the contralateral nasal fossa with left deviation of the columella, and disappearance of the nasolabial fold homolateral. The skin opposite was normal.

Endonasal examination found a total filling of the two nasal cavities by a mass of reddish color, and soft consistency; not bleeding on contact. It continued into the oropharynx (**Figure 1** and **Figure 2**)

The CT scan of the facial mass showed a mass of tissue density of the nasal fossae with lysis of the nasal septum and extension towards the three stages of the pharynx (**Figure 3** and **Figure 4**).

A biopsy carried out was in favor of an ulcerated fibro-inflammatory polyp.

A surgical excision by the trans-facial approach (right para-latero-nasal of Moure) was performed (**Figure 5**). The surgical procedure was performing under general anesthesia. The naso or oro-tracheal intubation was not possible, because the tumor was extended at the level of oropharynx. So we did the tracheostomy first under local anesthesia. After incision we did the resection of the mass. The bleeding was not abundant. The follow up was simple, we remove the



Figure 1. Clinical aspect of the patient.



Figure 2. Profile view of the patient.



Figure 3. CT view of the nasal tumor nasopharynx and septal lysis.



Figure 4. Extension of the mass to the nasopharynx and oropharynx.

compresses inside the post-operative cavity after 3 days, and the patient did the nasal washing with saline water 9_{0/00} for two weeks. The duration of admission was for 5 days. Histological analysis concluded in a granular cell tumor (**Figure 6**). More than a year after surgery the patient is doing well, no signe of recidive (**Figure 7**).



Figure 5. Per-operative view of the tumor.

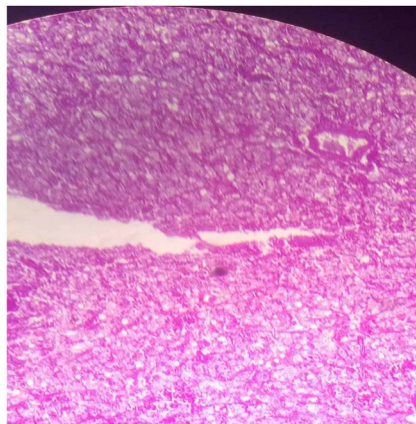


Figure 6. Microscopic view: proliferation in layers of large cells, with microgranular eosinophilic cytoplasm and a round nucleus.



Figure 7. Post-operative aspect of the patient (after 6 month).

3. Discussion

Granular cell tumors or Abrikossof's tumors are rare benign tumors. They represent 0.019% to 0.03% of all tumors [3]. They develop at the expense of any anatomical site but the cervicofacial localization is the most common; particularly lingual [4]. The endonasal localization of Abrikossof tumors is unusual and rarely reported in the literature.

The epidemiological aspects: our patient has 48 years old and was a man. The abrikossof tumor appears most in the women, the female sex is particularly affected with a sex ratio of 2/1 [5]. That was one of the particularities of our case. The age of the patient is similar to the literature review, this affection occur at any age with a peak frequency between 20 - 60 years [6].

Clinically it appears as a protruding nodule of about one to 8 centimeters that is firm to palpation, non-inflammatory. The voluminous form described in our observation is probably due to the delay in diagnosis and management. In literature review, most of case are small most of them are discovered under 2 cm [7] the patients consult early. In our environment the low socio-economic level, ignorance make the patient consult late. And also the nasal localization is less visible than other (oral cavity...).

Surgical treatment allows total removal of the tumor and reduces the risk of recurrence. The voluminous nasal localization also poses a problem of procedure, the enormous size make us to choose the external approach than the endonasal endoscopic procedure. The patient pass through a tracheotomy procedure first, because the extension to the nasopharynx and oropharynx make the normal intubation difficult. Certain forms can also pose problems of reconstruction in the event of a delabrous exercise [6] the patient in our observation was able to benefit from a simple edge-to-edge closure.

The diagnosis is pathological, immunohistochemistry can help to specify the diagnosis, and reveals a nervous origin (Schwann cells) [5].

4. Conclusion

Abrikossof's tumor is a rare ubiquitous benign tumor but whose preferential development occurs at the expense of the ENT sphere. The nasal localization is rare. Large forms remain the preserve of poor environments. The diagnosis is pathological and the treatment is surgical.

Conflicts of Interest

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

References

- [1] Benaouf, S., Khelifa, M., Bouzouina, F. and Tabeti-Bentahar, C.F. (2015) Caractères différentiels entre la tumeur de Neumann et la tumeur d'Abrikossof : à propos de deux observations cliniques. *63ème Congrès de la SFCO*, Article No. 03007.

<https://doi.org/10.1051/sfco/20156303007>

- [2] Nathan, A.M. (2014) Tumeur à cellules granuleuses de la langue: à propos d'un cas Clinique. *Le Chirurgien-Dentiste de France*, 1602-1603.
- [3] Barnes, L., Eveson, J.W., Reichart, P., Sidransky, D., *et al.* (2005) Pathology and Genetics of Head and Neck Tumours. In: Kleihues, R., Sobin, L.H., Eds., *World Health Organization Classification of Tumours*, IARC Press, Lyon.
- [4] Brannon, R.B. and Anand, P.M. (2004) Oral Granular Cell Tumors: An Analysis of 10 New Pediatric and Adolescent Cases and a Review of the Literature. *Journal of Clinical Pediatric Dentistry*, **29**, 69-74.
<https://doi.org/10.17796/jcpd.29.1.h310lq3363522441>
- [5] Sposto, M.R., De Andrade, C.R. and Navarro, C.M. (2006) Granular Cell Tumor (Abrikossoff's Tumor): Case Series. *Oral Oncology Extra*, **42**, 194-197.
<https://doi.org/10.1016/j.ooe.2005.11.009>
- [6] Dudrap, E., Auquit-Auckbur, I., Courville, P., Lemierre, G. and Milliez, P.-Y. (2008) Tumeur d'Abrikossoff: à propos d'une localisation du sillon inter-mammaire et revue de la littérature. *Annales de Chirurgie Plastique Esthétique*, **53**, 521-525.
<https://doi.org/10.1016/j.anplas.2008.03.002>
- [7] Ordonez, N.G. and Mackay, B. (1999) Granular Cell Tumor: A Review of the Pathology and Histogenesis. *Ultrastructural Pathology*, **23**, 207-222.
<https://doi.org/10.1080/019131299281545>