

Research Article

ETIOLOGY OF ODYNOPHAGIA SEEN IN OTOLARYNGOLOGY CONSULTATION AT CHU PLACE KABARY ANTSIRANANA MADAGASCAR

^{1,*} Andriamampionona Ginnot, B., ² Angelita Marie, E., ¹ Ralaivao Nasolo, F.P. and ² Rakotoarisoa Andriarimanana, H.N.

¹Otolaryngology Department, University Hospital, Andohatopenaka, Antananarivo, Madagascar

²Otolaryngology Department, University Hospital, Place Kabary, Antsiranana, Madagascar

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Abstract

Odynophagia is a symptom of functional concern. It is sometimes a therapeutic emergency in case of dehydration or malnutrition. The objective of this study was to describe the sociodemographic, clinical and etiological characteristics of odynophagia. **Patients and method:** This was a descriptive retrospective study over 3 years of all cases of odynophagia seen in the Otolaryngology Department, University Hospital, Place Kabary, Antsiranana, Madagascar. **Results:** In total, 42 cases of odynophagia were collected among the 682 patients seen in consultation during the study period, either a proportion of 6, 16%. The average age of the patients was 32, 76 years with a peak frequency in the age group of 15-30 years. The sex ratio was 0,45. A history of angina predominated with a rate of 33,34%. Half of the patients had previously received antibiotic therapy. A bad oral state was observed in 76, 19% of cases. The etiology of odynophagia was represented by angina in 45,25% of cases followed by pharyngitis in 19,05% of cases. **Conclusion:** Odynophagia was a significant reason for consultation in the ENT specialty. It was seen especially in young adults of the female gender with poor oral health. Angina was the main etiology.

Keywords: Angina, Etiology, Odynophagia.

INTRODUCTION

Odynophagia is a subjective sensation of pain felt during swallowing (Sereme *et al.*, 2016). It is sometimes an emergency and in all cases it is a worrying symptom on the functional level. In Madagascar, very few research had been noted at the national level. The relationship of odynophagia with lifestyle and with the incriminated etiologies, however, deserve to be taken into consideration. Thus, the objective of this study was to describe the sociodemographic, clinical and etiological characteristics of odynophagia.

PATIENTS AND METHOD

This was a monocentric, descriptive retrospective study conducted in the ENT and Cervico-Facial Surgery Department of the CHU Place Kabary Antsiranana Madagascar from 1st January 2018 to 31th December 2020. All patients who reported a notion odynophagia during the interview. Patients whose diagnostic hypothesis was poorly defined were excluded from this study. The parameters studied were sociodemographic, clinical and etiologies.

RESULTS

During the study period, 682 patients had consulted in the ENT and Cervico-Facial Surgery Department of the Place Kabary Antsiranana University Hospital. Among them, 42 cases of odynophagia were collected, with a frequency of 6.16%. The average age of the patients was 32, 76 years with extremes of 9 years and 69 years. The peak frequency of the age groups was between 15 and 30 years (Table 1).

The male gender represented 13 cases (30, 95%) and the female gender 29 cases (69, 05%). The sex ratio was 0, 45. Among the medical and surgical history, the history of angina predominated with a rate of 33, 34%. However, 52, 38% of patients had no medical or surgical history (Table 2). Half of the patients had received antibiotic therapy beforehand. An association with a nonsteroidal anti-inflammatory drug was observed in 9, 52% (Table 3). A bad oral state was observed in 76, 19%. There were no dental abnormalities in the remaining cases. Etiologically, angina predominated with a rate of 45,25% followed by pharyngitis with a rate of 19,05% (Table 4).

Table 1. Distribution of patients by age group

Age (years)	Number (n)	Percentage (%)
[0-15]	5	11,90
[15-30]	17	40,48
[30-45]	11	26,19
> 45	9	21,43

Table 2. Distribution of patients according to their medical and surgical history

History	Number (n)	Percentage (%)
Angina	14	33,34
Dental rabies	4	9,52
Tonsillectomy	2	4,76
No history	22	52,38

Table 3. Distribution of patients according to previous treatment

Previous treatment	Number (n)	Percentage (%)
Antibiotic alone	17	40,48
Antibiotic + anti-inflammatory	4	9,52
Without previous treatment	21	50

*Corresponding Author: Andriamampionona Ginnot, B.,

Otolaryngology Department, University Hospital, Andohatopenaka, Antananarivo, Madagascar

Table 4. Distribution of patients according to the etiology of odynophagia

Etiology	Number (n)	Percentage (%)
Angina	19	45,25
Pharyngitis	8	19,05
Peritonsillan phlegmon	5	11,90
Foreign bodies pharynx	4	9,52
Oropharyngeal tumor	3	7,14
Esophagitis	2	4,76
Thyroiditis	1	2,38

DISCUSSION

During the study period, 42 cases of odynophagia were collected among 682 ENT medical services, be a frequency of 6,16%. This rate was lower than those reported in the review of the African literature (Toure, 2019; Diarra, 2017). This could be explained by the presence of several health centers, traditional medicine and the habit of self-medication (Tarek *et al.*, 2019).

The average age of our patients was 32,76 years. This observation differs from those observed in outpatient ENT consultations in certain African countries (Toure, 2019; Diarra, 2017). The tendency of the population of Madagascar (Malagasy) to come to a specialist consultation only in the event of failure of the treatment undertaken or in the event of complications would explain our result. A bad oral state was observed in 76,19% of cases. This finding agrees with those observed by Georgalas and *al* (2002) in 67,7% of cases of oropharyngeal disease. In northern Madagascar and especially in Antsiranana, chewing « khat » leaves is now a common practice regardless of age and gender. A greater prevalence of caries and periodontal pathologies is observed in particular among regular consumers of « kath » due to the astringent properties of tannins, the pharmacological component of « kath » (Mehareche, 2019; Halbach, 1972).

It appears from our study that angina is the main etiology of odynophagia. Njifou and *al* in Cameroon had also found a notion of odynophagia in all patients in whom the diagnosis of angina was made (Njifou Njimah *et al.*, 2020). Similarly, on an assessment of doctors' knowledge of angina, 86% of them mentioned odynophagia in the diagnosis of angina (Bougossa *et al.*, 2020). On the other hand, several authors mention other etiologies of odynophagia: pharyngitis (Sykes *et al.*, 2020), peritonsillar phlegmon (Maamouri *et al.*, 2009), pharyngo-esophageal foreign bodies (Tazi *et al.*, 2014), gastro-esophageal reflux (Bossali *et al.*, 2017), retropharyngeal abscess (Keïta *et al.*, 2020), cancer upper aero-digestive tract (Kaur *et al.*, 2019), acute infectious epiglottitis (Lame *et al.*, 2018), opportunistic esophageal infection during AIDS (Mpressa *et al.*, 2018), tonsillar tuberculosis (Mighri *et al.*, 2006), cervical spread of odontogenic cellulitis (Randriamanantena *et al.*, 2014).

Conclusion

Odynophagia was a significant reason for consultation in ENT at the University Hospital Place Kabary Antsiranana Madagascar. Angina was the main etiology. The regular consumption of « kath » in this region is one of the factors favoring oral diseases. The relationship between oral status and conditions in the ENT sphere raises many questions and deserves to be analyzed in perspective.

REFERENCES

- Bossali F, Diembi S, Bikindou A, Koumou-Okandzé L, Ombila JW, Moussoni M. Les manifestations ORL du RGO à Pointe-Noire : étude rétrospective de 278 patients de 2005 à 2015. *J. Afr Hépatol Gastroentérol.*, 2017 ;1-4.
- Bougossa R, Wafa Marrakchi W, Kooli I, Toumi A, Loussaief C, Ben Brahim H *et al.* Évaluation des connaissances des médecins sur l'angine. 21^{èmes} Journées nationales d'infectiologie / Médecine et maladies infectieuses. 2020 ;50 :S31-S199.
- Diarra AM. Profil des consultations ORL en province. Cas de l'hôpital de Sikasso : aspects épidémiologiques, cliniques et thérapeutiques [Thèse]. Médecine et Odonto-stomatologie: Sikasso; 2017. 76p.
- Georgalas, Kanagalingam, Zainal, Ahmed, Shih meng Tsai, Kuan Jung Huang *et al.* The association between periodontal disease and peritonsillar infection: a prospective study. *American Academy of Otolaryngology-Head and Neck Surgery Foundation*, 2002;91-4.
- Halbach H. Medical aspects of the chewing of khat leaves. *Bull World Health Organ.*, 1972 ;32 :83-93.
- Kaur G, Singh M, Kaur M, Singh B, Gupta RK. Une étude clinico-pathologique des cancers des voies aéro-digestives supérieures. *Niger J Clin Pract.*, 2019;22(9):1208-12.
- Keïta A, Diallo I, Fofana M, Diallo MA, Diallo MMR, Balde O *et al.* Abcès rétropharyngé et la revue de la littérature : à propos de 5 observations. *PAMJ*, 2020 ;36(360) :1-11.
- Lame CA, Loum B, Diallo TB, Ndiaye A, Ndiaye CB, Ndiaye AR. Epiglottite aigue infectieuse : toujours d'actualité chez l'adulte. *Batna J Med Sci.*, 2018 ;6 :72-4.
- Maamouri M, Hamouda RB, Mansour S, Chorfa A, Chtioui I, Bouzaidi K. Phlegmon péri-amygdalien aspects diagnostiques et thérapeutiques. *J Tun ORL.*, 2009 ;22 :20-4.
- Mehareche N. Le khat : le danger d'une pratique culturelle dans la corne de l'Afrique [Thèse]. Faculté de Pharmacie : Lorraine ;2019.50p.
- Mighri K, Lahmar I, Hammami B, Jlaïel M, Moussa A, Driss N. La tuberculose extra-ganglionnaire de la sphère ORL. *J Tun ORL.*, 2006 ;16 :36-8.
- Mpressa EM, Njifou NA, Lingom LD, Feuwo A, Njock LR, Ndjolo A. Manifestations ORL chez des Personnes Vivant avec le VIH/SIDA à l'Hôpital Laquintinie de Douala-Cameroun : Une Étude de 200 Cas. *Health Sci Dis.*, 2018 ;19(3) ;64-8.
- Njifou Njimah A, Zounon DS, Ngaba GP, Vodouhé Bidossessi U, Fedjo Tefoyet G, Essama Eno Belinga L *et al.* Les angines bactériennes à Mbouda: Aspects cliniques et thérapeutiques. *Health Sci Dis.*, 2020 ;21(8) :72-5.
- Randriamanantena T, Rakotoarisoa AHN, Rakotoarivony AE, Rakotoarison RA, Razafindrabe JAB, Touré G *et al.* La diffusion cervicale d'une cellulite d'origine dentaire : à propos d'un cas clinique et d'un cas anatomique. *Revue d'odontostomatologie malgache en ligne*. 2014 ;8 :39-46.
- Sereme M, Tarnagda S, Guiguimde P, Gyebré YMC, Quedraogo B, Céline B *et al.* Les urgences infectieuses ORL. *Pan African Medical Journal*, 2016 ;25(27) :1-5.
- Sykes EA, Wu V, Beyea MM, Simpson MTW, Beyea JA. Pharyngite : approche diagnostique et thérapeutique. *Cam Pharm Physician*, 2020 ;66(4) :119-26.
- Tarek B, Hassan AB, Abdullah AA, Abdullah AB, Hassan AA, Hassan AO *et al.* Knowledge, attitude, behaviour, of the attitude healthcare professionals towards the self-medication practice with antibiotics. *J Infect Dev Ctries.*, 2019 ;13(1) :56-66.
- Tazi N, Barhmi I, Rouadi S, Abada R, Roubal M, Mahtar M. Les corps étrangers pharyngo-oesophagiens, l'expérience de notre service : à propos de 310 cas. *Annales françaises d'oto-rhinolaryngologie et de pathologie cervico-faciale*. 2014 ;131 :A104-60.
- Toure M. Morbidité en consultation externe dans le Service d'ORL-CCF du Centre de Santé de Référence de la commune VI: Bilan de 11 mois [Thèse]. Médecine et Odonto-stomatologie: Bamako; 2019. 63p.