



SWALLOWED FISH BONES IN MALI

Sacko HB

Health reference center of district IV Bamako

ABSTRACT

.Objective: To study the different aspects, clinical, diagnostic and therapeutic of 114 cases of fish bones in the upper digestive tract .

Methods: One hundred fourteen patients with fish bones suspected in the upper digestive tract were admitted in our department between February 2010 and October 2012.

Results: There was a predominance of the male: 66 men (58%). The average age of the patients was 26 years with extremes 3 to 62 years old.

The tongue base and vallecula are constituted the principals locations 66.66%. In the majority of the cases the fish bones were removed by direct pharyngoscopy in 43.86 %. We have not notified any serious complications.

Conclusion: Therefore this study shows the foreign fish bones are frequently just as well in children as adult.

The fish bones are particularly lodged in tongue base.

The classical methods of extraction are permit to remove the all foreign fish bones.

Introduction

The fish bones represent foreign bodies most frequently found in the upper digestive tract (about 60% able to refer to data from the literature ^(1,2,3,4).

The adult and the child over two years are both involved in the same way ^(1, 2, 3, 5). In a tropical environment its foreign bodies are not so rare and require urgent therapeutic gestures. They cause discomfort for patients and risks of complications especially when late diagnosis.

OBJECTIVE

This objective of this work was to study the different aspects, clinical, diagnostic and therapeutic of 114 cases of swallowed fish bones collected in our Department. of ENT diseases (Health reference center of district IV Bamako, Mali).

PATIENTS AND METHODS

The study involved 114 patients who have experienced a suspected foreign body ingestion be edges of fish during meal from February 2010 to October 2012 in the ENT Department of the Health Centre of reference (District N° IV of Bamako Mali).

Were included in this study the patients who have found objective clinical examination fish bones.

Were excluded from this study all patients for whom the objective examination did not the discovery of Fishbone.

The diagnosis of foreign body has been done through the following tests: direct pharyngoscopy, indirect or direct laryngoscopy, rigid esophagoscopy, X-ray front and profile of the esophagus. Lidocain 5% nebulizer allowed contact anesthesia to reduce the gag reflex and facilitate the discovery and extraction of foreign body, if the latter was localized at the level of the base of the tongue or in the vallecula to allow an indirect laryngoscopy.

RESULTS

There was a predominance of the male: 66 men (58%) for 48 women (42%)(Fig.1)The average age of the patients was 26 years with extremes of 3 to 62 years (fig. 2).

Table 1 shows the locations of the fish bones.

Table 2 summarizes the different methods for extraction of fish bones.

Both cases at the level of the base of the tongue from a girl of 10 years and an adult non-cooperating necessitated a direct laryngoscopy under general anesthesia. All localizations esophageal 9 cases (15.8%) have also benefited from extraction through rigid esophagoscopy.

56 patients (98.24%) received care within 48 hours after ingestion of the foreign body. Only a 36 years old patient was seen on the tenth day of the ingestion of the fish bone which was located in the cervical esophagus. No major complication has been reported in it outside a banal inflammatory reaction of the injured mucosa.

DISCUSSION

The swallowed fish bones are common as well in adults than children ^(1, 2, 6, 7, 8) in a tropical environment. Our work has enabled to observe some aspects of supported diagnostic and therapy of patients with fish bones in the upper digestive tract in a tropical environment.

In our study the fish bones are less found in the age groups of 0 to 10 years old and from 60 to 70 years; This trend could be explained by the fact that children of this age receive on the part of the elderly during the meal of fish very often devoid of edges and the same precautions are taken for the elderly in families to eat mainly fish that contain less edges. The majority of patients were male 33 cases (58%). Analysis of data from the literature fails to highlight the unanimity for this trend ^(3,6,4,9,8,10).

Dysphagia, odynophagia, the hypersialorrhea and substernal pain in esophageal location are the main clinical signs in patients with accidental ingestion of fish bones ^(7,4,8,10,11,12). These were present in most of our patients.

The direct pharyngoscopy, indirect laryngoscopy, rigid or flexible esophagoscopy, the flexible nasofibroscope allow to locate and extract these swallowed fish bones... ^(8,10,11). Its diagnostic and therapeutic approaches have allowed us to manage our patients adequately: 15 fish bones (26.31%) mainly localized at the level of tonsils and the pillars have been extracted by direct pharyngoscopy. Indirect laryngoscopy allowed extraction of 21 fish bones (36.84%) localized predominantly at the level of the base of the tongue and the vallecula.

The direct laryngoscopy can be useful in the extraction of foreign bodies from the hypopharynx whose extraction is difficult under indirect laryngoscopy (9). We had to resort to this method of extraction in two cases (3.51%). The fish bones located in the cervical esophagus bones require extraction under rigid esophagoscopy ^(3,6,7,8,10).

Some authors prefer the rigid esophagoscopy despite a few rare cases of perforation of the esophagus it may cause ^(1,2,8,13,14). 6 Cases (13.33%) of fish bones located in the upper third of the esophagus have been extracted through rigid esophagoscopy without any complications under general anesthesia.

The less important rate of tonsillar localization (table 2) can be explained by the fact that most of these foreign bodies are initially seen in the department by medical assistants experiencing no difficulties to discover and extract the direct pharyngoscopy the fish bones who sit at the level of the palatine tonsils; The contribution of the ENT specialist is requested for the difficult cases (location of the base of the tongue, vallecula, esophagus...).

The benefits of the x-ray in the diagnosis of the fish bones in the upper digestive tract are controversial ^(15,13,14). X-ray front and profile of the esophagus can be useful for some esophageal location. Computed tomography (CT) is an important contribution compared to conventional radiography ^(1,15,16) in complicated cases. Oesogastroduodenal transit (TOGD) allows highlighting of these foreign bodies sitting in the thoracic esophagus ^(8,13,14,16). In our study the standard conventional radiography (neck, chest) have allowed a precise diagnostic orientation.

These complications of swallowed fish bones are different, they are usually: the abscess retropharyngeal, ulceration of the palatine tonsil or pillar, perforation of the esophagus, esophagitis, mediastinitis, cervical emphysema... ^(17,18,19); Their occurrence depends on the foreign body (nature of the foreign body, degree of trauma, delayed discovery...) and extraction maneuvers (crude extraction by the patient, ritual methods, rigid oesophagoscopy ...) ^(4,20,21).

Antibiotic associated with a brief corticosteroid therapy to reduce the risk of complications local, loco-regional or general ^(22,21,23). The anti-inflammatory nonsteroidals greatly reduce local reaction of the mucosa.

Localized inflammatory reactions in our patients were cured without the institution of special treatment. Only benefited from antibiotic treatment coupled with a non-steroidal anti-inflammatory and a local antiseptic of mouth for at least 5 days those whose reactions were disabling.

Conclusion

The swallowed fish bones are both common in young children than in adults in a tropical environment. The diagnosis made on time despite some technical difficulties often to locate in a trigger zone area that represents the oropharyngolaryngeal wall to minimize the risk of complications.

Direct pharyngoscopy and the indirect laryngoscopy after the contact anesthesia to greatly decrease the gag reflexes of patients by facilitating the extraction of these fish bones especially localized in the hypopharynx (base of tongue and vallecula). The cervical esophagus is the main site of these foreign bodies in esophagus. No major complications were observed.

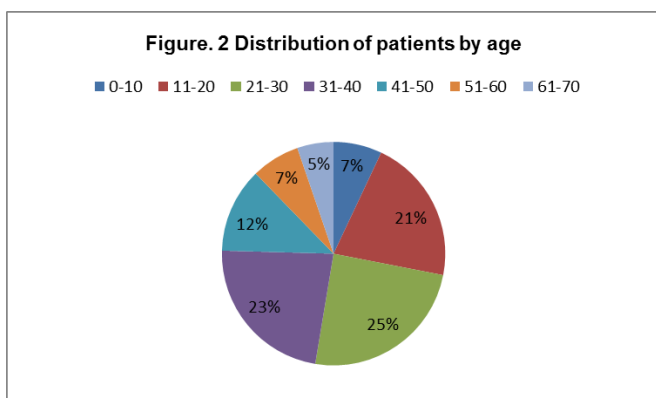
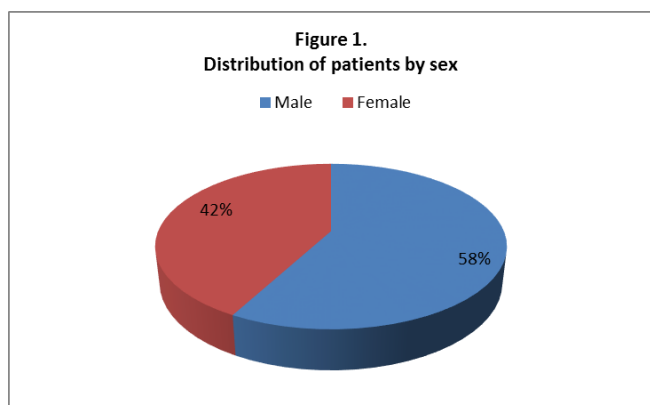
Site	Number	%
<i>Base of the tongue</i>	46	40,35
<i>Palatine tonsils and pillars</i>	30	26,31
<i>Vallecula</i>	20	17,54
<i>Esophagus</i>	18	15,8
Total	114	100

Table 1. Location of the fish bones

Table 2 : Means of extraction of fish bones.

Means of extraction	Number	%
<i>Direct pharyngoscopy</i>	50	43,86
<i>Indirect Laryngoscopy</i>	42	36,84
<i>Rigid oesophagoscopy</i>	18	15,80
<i>Direct laryngoscopy</i>	4	3,50
Total	114	100

Table 2 : Means of extraction of fish bones



References

1. AG mohamed A. Corps étrangers de l'oesophage (à propos de 130 cas). Bull. Soc. Path. Ex.,87,1994,241-243
2. AG mohamed A, S.K. Timbo, F.Konipo-Togola. Etude rétrospective des corps étrangers de l'oesophage en ORL, A propos de 193 cas colligés à l'hôpital Gabriel Touré de Bamako. Mali Médical,1995,10 (3&4)
3. Baraka A., Bikhazi G. Oesophageal foreign bodies. Br. Med. J., 1975, 1, 561-3.
4. Debrie J. C. et coll Les corps étrangers de l'oesophage (à propos de 60 cas) Dakar Médical, 1981, 26,2,272-275
5. Herranz Gonzalez J., Martinez Vidal J., Garcia Sarandeses A., Vasquez Barro C. Oesophageal foreign bodies in adults. Otolaryngol Head and Neck Surgery, 1991, 105, 649-654.
6. Crysdale W.S., Sendi K.S., Yoo J. Oesophageal foreign bodies in children. 15 year review of 484 cases. Ann. otol rhinol. laryngol., 1991, 100, 320-324.
7. Chong-teck Lim et al. A prospective study of ingested foreign bodies in Singapore Arch Otolaryngol Head Neck Surg, 120; 1994, 96-101.
8. Knight L.C., Lesser T.H.J. Fish bones in the throat. Arch. Emerg. Med., 1989, 6, 13-16.
9. Jackson c.l. Foreign bodies in the air and food passages; G.M. Otolaryngology, Edit; Harper and Row, Publishers, Philadelphia, 1987, 5, 1, 1-94.
10. Martin C. et al. Arêtes de poisson dans les voies aérodigestives : une année avec 183 cas. Revue de laryngol 1994, 3, 115, 187-189.
11. Ngan JHC, Fok P.J., Lai ECS, Branicki F.J., Wong J. A prospective study on fish bone ingestion : experience of 358 patients. Ann Surg 1990, 211 : 459-462.
12. Balasubramanian T. short topics in otolaryngology 2007, drtbalu's Otolaryngology on line

13. Nandi P., Ong B Foreign body in the the oesophagus : Review of 394 cases. *Br. J. Surg.*, 1978, 65, 5-9.
14. Phillips J.J., Patel P. Swallowed foreign bodies. *J. Laryngol. Otol.*, 1988, 102, 235-241.
15. Koorhof P.G., DU Plessis L.J., Claassen A.J. Swallowed fish bones is radiography justified ? A case report *S. Afr. J. Surg.*, 1990, 28, 4, 158-160.
16. Turtz M.G., Stool S.E. Foreign bodies of the pharynx and oesophagus. In *pediatric Otolaryngology*, Saunders Company, 1983,II,56,1095-1110
17. Bathla G, Teo LL, Dhanda S. Pictorial essay: Complications of a swallowed fish bone. *Indian J Radiol Imaging*. 2011 Jan;21(1):63-8. doi: 10.4103/0971-3026.76061.
18. Rodríguez H, Passali GC, Gregori D, Chinski A, Tiscornia C, Botto H, Nieto M, Zanetta A, Passali D, Cuestas G. Management of foreign bodies in the airway and oesophagus. *Int J Pediatr Otorhinolaryngol*. 2012 May 14;76 Suppl 1:S84-91. doi: 10.1016/j.ijporl.2012.02.010.
19. Kalkan IH, Etik DÖ, Oztaş E, Sayilir A, Dişibeyaz S, Kuran SÖ.
- A rare cause of upper GI hemorrhage: an uncorrupted sponge migrating into the duodenal bulb (with video). *Gastrointest Endosc*. 2012 Dec;76(6):1246. doi: 10.1016/j.gie.2012.07.027.
20. Imran Hamid U, Booth K, McManus K. Is the way to a man's heart through his stomach? Enteropericardial fistula: case series and literature review. *Dis Esophagus*. 2013 Jul;26(5):457-464. doi: 10.1111/j.1442-2050.2012.01373.x.
21. Maiss J, Raithel M, Nägel A. [Foreign bodies in the upper gastrointestinal tract]. *HNO*. 2012 Sep;60(9):792, 794-7. doi: 10.1007/s00106-012-2489-y. German.
22. Nishino T, Shinzato T, Uramatsu T, Obata Y, Arai H, Hayashida T, Kohno S.
- Bacterial peritonitis due to duodenal perforation by a fish bone in an elderly peritoneal dialysis patient. *Intern Med*. 2012;51(13):1715-9.
23. Gundling F, Seidl H, Stark T, Schneider A, Schepp W.
- [Management of impacted foreign bodies in the upper gastrointestinal tract in adult patients - results of a retrospective case series]. *Z Gastroenterol*. 2012 Dec;50(12):1287-91. doi: 10.1055/s-0032-1313188. German.

12. Foreign bodies in the nasal cavities: a comprehensive review of the aetiology, diagnostic pointers, and therapeutic measures; *Postgrad Med J* 2000;76:484-487 doi:10.1136/pmj.76.898.484
13. McMaster WC; Removal of foreign body from the nose. *JAMA* 213:1905. (1970)
14. Kerr AG, Walby AP, Foreign bodies in the ear or nose. *Scott-Brown's otolaryngology*. Kerr AG (Butterworth-Heinemann, Oxford), 6th Ed. pp 6/14/1–6/14/6. (1997)
15. Figueiredo RR, Dorf S, Couri MS, Azevedo AA, Mossumez F. Corpos estranhos animados em otorrinolaringologia. *Rev Bras Otorrinolaringol*. 2002; 68:722-9.
16. Morris MS ;New device for foreign body removal. *Laryngoscope* 94:980;(1984)