



Foreign Bodies in Ear Nose And Throat : An Experience in Tertiary Level Hospital

KEYWORDS

Foreign body, ear , nose, throat

Shaila Sidam

A. K. Jain

ABSTRACT A lot of patients of foreign body come to the ENT department so a retrospective review was done in ENT department of GRMC, Gwalior. About 179 patients with foreign body in ear nose and throat region presented to department of ENT , GRMC, Gwalior during one year(2015). As foreign body is a common problem frequently encountered both in children as well as in adults so its accurate diagnosis and timely management without any complication is often very challenging.

Introduction

Foreign body in ear nose and oropharynx is a very frequent complaint of the patient attending the out patient department as well as in the emergency. According to the literature, foreign bodies are responsible, on average, for 11% of otorhinolaryngological emergencies [1]. It may be the reason for increased morbidity and mortality. The most important issue is their accurate diagnosis , safe and early removal without any complication. So the present study tries to describe the foreign bodies encountered in ear nose and throat.

Material and Method

A retrospective study was done in department of ENT, GRMC, Gwalior. It comprises of 179 patients of foreign body in ear nose and throat attending the ENT department during the last one year. All patients were evaluated carefully with thorough history taking and complete ENT examination. Investigation like X-ray and CTscan were done for location and confirmation of foreign body which was followed by removal of foreign body.

Observation

Table 1

Age in years	No of cases	%
0-5	50	27.9
6-10	42	23.4
11-20	25	13.9
21-30	20	11.1
31-40	15	8.3
41-50	10	5.5
51-60	12	6.7
>60	5	2.7
Total	179	

About 179 patients came with the complaints of foreign body, with maximum number in the age group in 0-5 years(50 patients, 27.9%), followed by 6-10 years(42 patients, 23.4%), 11-20 years(25 patients, 13.9%), 21-30 years (20 patients, 11.1%), the least number was seen in the age group >60 years(5 patients, 2.7%).

Table 2

Foreign body in ENT	No of cases	%
Ear	65	36.3
Nose	52	29
Throat	62	34.6
Total	179	

About 179 patients of foreign body had reported to the ENT department, with maximum number of ear foreign body 65 patients(36.3%), followed by throat foreign body 62 patients(34.6%), and 52 patients(29%) had nose foreign body.

Table 3

Foreign body(dealt)	No of cases	%
Out patient	114	63.6
Admitted	65	36.3
Total	179	

Out of 179 patients of foreign body, 114(63.6%) cases were dealt in the out patient department and 65 patients (36.3%) were admitted for foreign body removal.

Table 4

Type of foreign body	No of cases	%
Seeds(nose)	25	21.3
Insects(ear)	20	17
Chalk(ear & nose)	8	6.8
Sponge(ear & nose)	6	5.1
Pencil(ear)	7	5.9
Rubber(ear & nose)	7	5.9
Crayon(ear)	6	5.1
Cell(battery)(nose)	5	4.2
Paper(ear & nose)	10	8.5
Stone(ear)	5	4.2
Pearl(ear)	3	2.5
Thermacol balls(ear & nose)	15	12.8
Total	117	

About 117 patients had complaints of ear and nose foreign body, with maximum number having seed (vegetative) foreign body 25 patients(21.3%), followed by insect foreign body in 20 patients (17%), Thermancol balls in 15 patients(12.8%), paper foreign body in 10 patients(8.5%), chalk in 8 patients(6.8%), and 7 each of pencil and rubber foreign body(5.9%).

Table 5
Foreign Body Throat

Type	Number	Percentage
Coins	39	72%
battery	1	1.8%
Locket	1	1.8%
Nail	1	1.8%
Button	1	1.8%
Others	11	20%
Total	54	

A total of 54 patients came to the emergency with the complaints of foreign body throat, of which 39 (72%) patients had complains of coin ingestion in throat, 1(1.8%) patient each of foreign body battery, locket, nail, and button had also reported, others comprised of 11(20%) patients.

Table 6
Foreign Body Bronchus

Type	Number	Percentage
Plastic whistle	2	25%
Seed (custard apple)	2	25%
Ground nut	1	12.5%
other	2	25%
No foreign body	1	12.5%
Total	8	

A total of 8 patients underwent emergency bronchoscopy for their complaints of foreign body in airway, out of which no foreign body was visualized in 1(12.5%) patient and 2(25%) patients each had foreign body as seed, plastic whistle and in other category there were 2(25%) patients.

Discussion

Otorhinolaryngologists deal with most of the natural orifices that are habitually exposed, such as the mouth, nostrils and ears. The oesophagus and lower airways are affected indirectly, as foreign bodies must first pass through the pharynx or the nasal fossae. Foreign body ingestion is usually accidental, but it may be homicidal or suicidal occasionally.

Foreign bodies may vary widely in shape, size and composition.[1] In our study, the most common age group affected was between 1 and 5 years (Table 1) which correlates with most of the studies [2–5]. Children are mostly affected due to their tendency to take things in their mouth, inability to masticate well and inadequate control of deglutition, as well as tendency to cry, shout and play during eating [6]. In elderly patients, edentulous condition and poor masticating habits are the predisposing factors [6].

The most common ear foreign bodies include beads, plastic toys, and paddy seed, popcorn kernels. Insects are more common in patients older than 10 years. In many cases, patients with foreign bodies in the ear are asymp-

tomatic, and in children the foreign body is often an accidental finding. Other patients may present with pain, symptoms of otitis media, hearing loss, or a sense of ear fullness.[1]

The most common site of impaction of foreign body inside nasal cavity is between the septum and inferior turbinate which is anatomically narrowed part. Impacted foreign body presents with unilateral foul smelling nasal discharge. [1]

Foreign body in digestive tract presents with dysphagia, foreign body sensation inside throat, odynophagia and pooling of saliva. In our study, coin is the most common foreign body (Table 5) found inside the throat which is similar to Sam et al. [5] and commonest site of lodgement is the cricopharynx. Coin being the daily object of trans-action , go to the hands of the toddlers and children and they accidentally swallow it.

Radiological investigations like X-ray, CT scan, are very useful diagnostic tool. In our study we advised X-ray in patients whose foreign bodies were not visible from outside. CT scan and MRI are rarely useful in the evaluation of foreign bodies in the aerodigestive tract, but are indicated where the object is not found during endoscopic examination and migrated extraluminally and where its presence is unusual and in difficult to reach areas.[1]

Foreign bodies from the digestive tract are usually removed by esophagoscopy using rigid fiberoptic esophagoscope under general anaesthesia as we have done in our study. But flexible fiberoptic scope can also be used. It easily helps to detect the site of impaction of foreign body. Sometimes, especially in aged patients with cervical spondylosis where neck extension is not possible, it can be used to remove the foreign bodies.[1] Another method is pushing the foreign body into the stomach with a bougie [7].

Usual complications related with the foreign bodies are anaesthetic complications. Apart from that, oesophageal perforation, mediastinitis and pulmonary complications are also important complications. Longstanding foreign body may cause erosion of oesophageal wall. Oesophageal stricture is a late complication.[1]

Adequate visualization, appropriate equipment, a cooperative patient and a skilled physician are the keys to successful foreign body removal. The site of impaction, size, and shape of foreign body is important to plan the management protocol.

Xray showing a nail foreign body ingestion.



X-ray showing a locket foreign body ingestion.**References**

1. Ritam Ray, Manatosh Dutta, Manoj Mukherjee et al; Foreign body in ear, nose and throat: Experience in tertiary hospital; Indian journal Otolaryngol head Neck Surg; (Jan-March 2014); 66(1); 13-16.
2. Banerjee S (1999) Concept of foreign body, in past and present. Indian J Otolaryngol Head Neck Surg 51(1):23-30. doi: 10.1007/BF03001548
3. Das SK (1984) Aetiological evaluation of foreign bodies in the ear and nose. J Laryngol Otol 98:989-991
4. Higo R, Matsumoto Y, Ichimura K, Kaga K (2003) Foreign bodies in the aerodigestive tract in paediatric patients. Auris Nasus Larynx 30:397-401
5. Endican S, Ear Joseph P (2006) Nose and throat foreign bodies in Malaysian children: analysis of 1037 cases. Int J Paediatr Otolaryngol 70(9):1539-1545
6. Jyothi AC, Shrikrishna BH, Sanjay G, Sandeep SG, Chaitanya V (2011) A clinical study regarding foreign bodies in aerodigestive tracts. Odisha J Otolaryngol Head Neck Surg 5(1):9-15
7. Bonadio WA, Jona JZ, Glicklich M, Cohen R (1988) Esophageal bouginage technique for coin ingestion in children. J Pediatr Surg 23:917-918.