

Original Research

Assessment of foreign Body in Ear, Nose and Throat: A retrospective study

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ABSTRACT:

Introduction: A foreign body (FB) is an object or substance foreign to the location where it is found. FBs in the ear, nose, and throat are a common problem frequently encountered in both children and adults. **Methods:** The study involved 100 participants in all. The diagnosis of FB of the nose and ear was made using anterior rhinoscopy and otoscopy examinations, respectively. When anterior rhinoscopy failed to reveal probable cases of FB in the nasal cavity, rigid or flexible nasal endoscopic examination was also carried out. **Results:** A total of 100 patients—80 men and 20 women—had FBs in the ear, nose, or throat. Of the 100 patients, 25 (25%) had FB in the nose, 10 (10%) in the throat, and 55 (55%) had FB in the ear. In contrast, the FB was inanimate (nonliving) in any patient with FB in the neck, in 25 (45.45%) patients with FB in the ear, and in 20 (80%) patients with FB of the nose. The FB was animate (living) in 30 (54.54%) patients with FB in the ear and in 5 (20%) patients with FB in the nose. Only 35 patients (or 35% of the total) required general anaesthesia (GA), while 65 patients (or 65%) had their FB removed with or without local anaesthetic (LA). Affected age groups ranged from 10 years and younger. **Conclusion:** FBs in the ear and nose were found more frequently in children. Most of the FBs can be easily removed in emergency room or outpatient department.

Keywords: foreign body, ear, nose, throat, endoscopy

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INTRODUCTION

A foreign body (FB) is any object in a region it is not meant to be, where it can cause harm by its mere presence if immediate medical attention is not sought.¹ It can be found in the ear, nose, and throat (ENT) region. FB may be classified as animate (living) and inanimate (nonliving). The inanimate FBs can further be classified as organic or inorganic and hygroscopic (hydrophilic) or nonhygroscopic (hydrophobic).² The presence of FBs in the ENT region is one of the most common causes of otolaryngologic emergencies. FBs can be introduced spontaneously or accidentally in both adults and children. Generally, FBs are more common in younger children; this may be due to various factors such as curiosity to explore orifices, imitation, boredom, playing, mental retardation, insanity, and attention deficit hyperactivity disorder, along with availability of the objects and absence of watchful caregivers.³ Foreign bodies in the nose, ears and the oropharynx are reason for frequent visits to otorhinolaryngology

emergency units. According to the literature, foreign bodies are responsible, on average, for 11% of otorhinolaryngological emergencies.⁴

Hence, the current study was conducted to evaluate foreign Body in Ear, Nose and Throat.

MATERIAL AND METHODS

The study involved 100 participants in all. The diagnosis of FB of the nose and ear was made using anterior rhinoscopy and otoscopy examinations, respectively. When anterior rhinoscopy failed to reveal probable cases of FB in the nasal cavity, rigid or flexible nasal endoscopic examination was also carried out. FB was extracted from the nose and ear using tools such the Jobson Horne probe, FB hook, Tilley forceps, and crocodile forceps. Patients with a history of FB consumption had a routine neck X-ray taken. When the FB was not apparent on the X-ray, flexible upper gastrointestinal endoscopy and flexible nasopharyngolaryngoscopy were performed to rule out the presence of an FB or to identify its site of

impaction. This was followed by rigid esophagoscopy or direct laryngoscopy to remove the FB from the oropharynx/hypopharynx and the oesophagus, respectively.

RESULTS

A total of 100 patients—80 men and 20 women—had FBs in the ear, nose, or throat (Table 1). Of the 100 patients, 35 (35%) had FB in the nose, 10 (10%) in the throat, and 55 (55%) had FB in the ear (Table 2).

In contrast, the FB was inanimate (nonliving) in any patient with FB in the throat, in 25 (45.45%) patients with FB in the ear, and in 20 (57.14%) patients with FB of the nose. The FB was animate (living) in 30 (54.54%) patients with FB in the ear and in 15 (42.8%) patients with FB in the nose. Only 35 patients (or 35% of the total) required general anaesthesia (GA), while 65 patients (or 65%) had their FB removed with or without local anaesthetic (LA). Affected age groups ranged from 10 years and younger.

Table 1: gender wise distribution of subjects

Gender	Number of subjects	Percentage
Males	80	80%
Females	20	20%
Total	100	100%

Table 2: illustration of foreign body in various parts

Body part	Number of subjects	Percentage
Ear	55	55%
Nose	35	35%
Throat	10	10%
Total	100	100%

DISCUSSION

Foreign bodies may vary widely in shape, size and composition. In our study, the most common age group affected was between 1 and 5 years (Table 1) which correlates with most of the studies.^{5,6,7,8} 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. In elderly patients, edentulous condition and poor masticating habits are the predisposing factors.⁹ Foreign body ingestion is common in children, but frequently seen among intellectually challenged or mentally ill adults also.¹⁰ Foreign body is usually ingested accidentally, but it may be homicidal or suicidal occasionally. Hence, the current study was conducted to evaluate foreign Body in Ear, Nose and Throat.

In this study, a total of 100 patients—80 men and 20 women—had FBs in the ear, nose, or throat (Table 1). Of the 100 patients, 35 (35%) had FB in the nose, 10 (10%) in the throat, and 55 (55%) had FB in the ear (Table 2).

In contrast, the FB was inanimate (nonliving) in any patient with FB in the throat, in 25 (45.45%) patients with FB in the ear, and in 20 (57.14%) patients with FB of the nose. The FB was animate (living) in 30 (54.54%) patients with FB in the ear and in 15 (42.8%) patients with FB in the nose. Only 35 patients (or 35% of the total) required general anaesthesia (GA), while 65 patients (or 65%) had their FB removed with or without local anaesthetic (LA). Affected age groups ranged from 10 years and younger.

In a study conducted by Ray R et al¹¹, maximum patients were within below five age group (43.8%). There was a male predominance. Out of 334 cases, 172 cases (52%) were males and 162 cases (48%) were females. Vegetable foreign bodies are commonly impacted inside nasal cavity whereas metallic foreign bodies were commonly impacted inside aerodigestive tract. About 31.7% foreign bodies were radio opaque and 19.4% foreign bodies showed normal radiograph. In rest 48.9% of cases, no radiograph was done because in those cases the foreign body was visible to naked eye. Most common foreign body we encountered was coin (24.85%), followed by fish bone (15.56%) and vegetable seeds (14.67%). Then were the maggots (11.07%)

Awad AH et al.¹² carried out a study to analyze the clinical spectrum of ENT FBs, the methods of removal, the outcomes and complications. Patients with any type of ENT FBs, regardless of age, were included in the study; data was collected from 1,013 patients (572 males and 440 females) with a mean age of 12.5 years. It was found that foreign bodies represented a large category among ENT emergencies (30%). Children were affected more frequently, particularly ≤ 6 years old. Swallowed FBs were the most common (53.6%), followed by aural FBs (24.68%), nasal FBs (19%), and inhaled FBs (2.6%). A total of 54.69% of FBs were removed under general anaesthesia (GA). It was concluded that foreign bodies (FB) in the ears, nose or throat were a common occurrence in otorhinolaryngology (ENT) emergency services. Children were the most affected age group. The commonest site of FB lodgment was in the throat.

CONCLUSION

FBs in the ear and nose were found more frequently in children. Most of the FBs can be easily removed in emergency room or outpatient department.

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