

## STUDY ON FOREIGN BODIES IN A TERTIARY PRIVATE HOSPITAL

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### Abstract

A foreign object is something that is in the body but doesn't belong there. The present study makes an attempt to find the incidence of foreign bodies among the study subjects in ENT department in a tertiary private hospital. The study design is a cross-sectional study and a sample size of 220 cases was collected from 1st March 2017 to 28<sup>th</sup> February 2018 based on simple random sampling. Results: Out of total of 220 cases, 102 were females and 118 were male.

**Keywords:** Foreign body, FIMS, Kadapa, nose, ear

### 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] The inanimate FBs can further be classified as organic or inorganic and hygroscopic (hydrophilic) or nonhygroscopic (hydrophobic). [2] Foreign bodies (FBs) in the ear, nose, and throat (ENT) are commonly seen in the medical practice by otorhinolaryngologists, pediatricians, Emergency Department surgeons, physicians, and even in the primary care setting. [3] According to the literature, foreign bodies are responsible, on average, for 11% of otorhinolaryngological emergencies. [4]

### Materials and Methods:

The study design is a cross-sectional study, and a sample size of 220 cases were collected from 1st March 2017 to 28<sup>th</sup> February 2018 based on simple random sampling. After obtaining informed consent, history was obtained from the selected study subjects at the otorhinolaryngology outpatient clinic of teaching hospital of Fathima Institute of Medical Sciences, Kadapa, AP.

### Statistical Analysis:

A standardized set of data was abstracted for each case and statistical analysis done according to the data collected. Descriptive statistics including frequency distribution and proportions were calculated. 95 percent confidence limits computed.

**Objective:** To study the incidence of foreign bodies among the study subjects in ENT OPD.

### Results and Discussion:

Out of total of 220 cases, 102 were females and 118 were male.

**Table 1: Distribution by age:**

Age (years)	Total No. of patients	Percentage
<10	102	46.4
10-20	42	19.1
20-30	12	5.5
40-50	14	6.4
50-60	16	7.3
≥60	34	15.5
Total	220	100

Prevalence of foreign body among <10 years age group was 46.4%, followed by 10-20 year age group.

**Table 2: Distribution of foreign body based on gender:**

Foreign body	Female	Male
Total No. of Cases	102 (46.4%)	118 (53.6%)

Majority of the study subjects were male.

**Table 3: Distribution of foreign body based on residence**

Residence	Rural	Urban
Total No. of Cases	160 (72.7%)	60 (27.3%)

Majority of the study subjects were from rural areas.

**Table 4: Types of foreign body**

Types of foreign body	Total no.
Coin (throat)	35
Pencil led (ear)	30
Battery (throat)	25
Fish bone (throat)	20
Maggot (nose and ear)	40
Chalk (nose)	22
Chicken bone (throat)	5
Denture (throat)	7
Ring (throat)	3
Tamarind seeds (ear)	10
Insects (ear)	13
Small battery (nose)	10

Maximum foreign body was because of coin in the throat, pencil led in ear followed by maggots.

Adults and older children usually give a history of FB lodgement in ENT. But younger children are brought to the clinic by anxious parents or relatives. FBs may vary widely in shape, size, and composition, and the symptoms may range from asymptomatic to acute life threatening condition.

In our study, the most common age group affected was age < 10 years, similar to results found in many other studies. [5-10] This may be due to the tendency of young children to lodge objects into the natural orifices of body, accidentally or intentionally.

Highest number of FB were found in throat (95) followed by nose & ear (40) ear (53) and nose (32) in this study. In our study the most common site of FB lodgement had been Throat which is in corroboration with the study of Saurav Sarkar [10] conducted in 2010.

A large number of patients in this study was of the pediatric age group which is similar to the findings in the study conducted by Schulze et al. in 2002. [11] Unilateral, foul-smelling, purulent nasal discharge in children must be regarded as due to FB until proved otherwise.

Most of the FB have been removed in ER, with 20 patients requiring GA for removal. Patients usually present with earache, aural fullness, or ear discharge. Occasionally it may be asymptomatic and found incidentally during routine otoscopic examination. Examination under a microscope helps to confirm the presence of FB in the ear and aids in its removal under intravenous sedation/GA to minimize trauma to the tympanic membrane and external auditory canal. It is useful especially in children who are not cooperative to allow proper otoscopic examination when there is associated otitis externa. Ear syringing led to successful removal of most of the nonhygroscopic FBs. Negative pressure suctioning can be useful especially when there is aural or nasal discharge along with the FB.

Coin was the most common FB in the throat in children in our study, which is similar to other studies; this may be due to fact that the coins are often handed to younger children and they accidentally swallow because of their tendency to take things into the mouth, inadequate control of deglutition and shouting or crying while playing or eating.

#### Conclusion:

Foreign bodies in the ears, nose or throat are a common occurrence in otorhinolaryngology emergency services. Children are the most affected age group. The most

common site of FB lodgement is in the throat. Ear, nose and throat FBs need to be properly managed to avoid complications.

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