

## Clinical Profile Of Different Type Of Foreign Body In Ear Nose And Throat At Sir T. Hospital, Bhavnagar

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**Abstract:** Background: Then symptoms caused by impaction of foreign bodies depends on the nature of the objects, site, duration of lodgement. Foreign body is more common in young children than adult, Children are at high risk of object into mouth to determine their taste. Adult aspirated the foreign body influence of alcohol, sedative or unconsciousness due to head trauma. to study the different types, age and gender wise distribution and clinical presentations of various foreign bodies in ear, nose and throat. Material And Methods: 100 Patients presented with foreign bodies in ear nose or throat were included in this study. This study was done from 1st June 2021 to 31may 2022 at ENT Department Sir T. General Hospital, Bhavnagar. The graphical representations were used to analyse the data. Result: The most common age group affected was <10 years. Out of 100 patients with foreign bodies in the ear, nose, or throat, 56 were males and 44 were females. Out of 100 patients, 22 (22%) had foreign body in the ear, 28 (28%) foreign body in the nose, and 50 (50%) in the throat. The foreign bodies were removed with or without local anaesthesia (LA) in 48 (48%) patients, 52 patients (52%) required general anaesthesia (GA) for removal of foreign body. Conclusion: Most of the foreign bodies were seen in children within age group of 0-10 years. Gender wise distribution of foreign body in ear nose throat was nearly same for both genders, foreign body in ear or nose were diagnosed and treated on OPD basis. Foreign bodies below the level of oropharynx required general Anaesthesia for their removal. Most common foreign bodies in the ear were stones, seeds, and slate pencils, in the nose they were seeds, stone and sticks and in the throat were coins, mutton bones and needles. [Meena M Natl J Integr Res Med, 2023; 14(3): 10-13, Published on Dated: 18/05/2023]

**Key Words:** Foreign Body, Ear, Nose, Throat, Oesophagoscopy, Bronchoscopy

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**Introduction:** The symptoms caused by impaction of foreign bodies depend on the nature of the objects, site and duration of lodgement. Foreign body is more common in young children than adults. Children are at high risk of ingestion of foreign bodies. Adult aspirates the foreign body in the influence of alcohol, sedatives or unconsciousness due to head trauma.

All the foreign bodies need to be removed as they cause acute and chronic complications such as laryngeal spasm, foreign body granuloma, mediastinitis, pericarditis, pneumothorax, pneumo-mediastinum and vascular injury due to penetration. All such problems resulting into morbidity and mortality can be avoided with early diagnosis and proper management.

**Material & Methods:** This is a prospective observational study conducted in ENT Department of Sir T Hospital Bhavnagar for period of one year i.e., from June 2021 to 31may

2022 after approval of ethics committee government medical college Bhavnagar.

Inclusion Criteria: All the patients presented with foreign body in ear, nose and throat.

Method of Study: Detailed history of the patient was taken. Patients were enrolled for this study after taking written and informed consent of patient or guardian. Detailed examination of ear, nose and throat done along with examination of respiratory system in patients with aspiration and suspected foreign body in bronchus was done.

Investigations Like: Routine blood and urine examination.

X-Ray: Nose, neck and chest to visualize the radio opaque foreign body and to know the site of impaction. Management of the patient was based on the type of foreign body and site of impaction. In cooperative patients with foreign body in the

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ear or nose were removed in the outpatient department. In non-cooperative patients, it is removed under short general anaesthesia. Foreign bodies in the tracheobronchial tree were

removed by bronchoscopy under general anaesthesia. Foreign bodies in the oesophagus were removed by esophagoscopy under general anaesthesia.

**Results:** Results are as follows.

**Table 1: Age Wise Distribution Of Cases With History Of Foreign Body – Ear, Nose And Throat**

Age Group (Years)	No. Of Cases	Percentage
0 – 10	70	70.00
11 – 20	8	8.00
21 – 30	8	8.00
31 – 40	6	6.00
41 – 50	0	0
51 – 60	6	6.00
61 – 70	2	2.00
Total	100	100.00

**Table 2: Sex Wise Distribution**

Sex	No. Of Cases	Percentage
Male	56	56.00
Female	44	44.00
Total	100	100.00

**Table 3: Cases Distribution**

Involvement	No. Of Cases	Percentage
Ear	22	22.00
Nose	28	28.00
Throat	50	50.00
Total	100	100.00

**Table 4: Mode Of Management Of Foreign Body**

Mode Of Management	Ear	Nose	Throat
Foreign Body Removed In OPD	18	26	4
Foreign Body Removed In OT	4	2	46
Total	22	28	50

**Table 5: Type Of Foreign Bodies**

Ear		Nose		Throat	
Stone	4	Safety Pin	2	Coin	28
Pencil Lead	4	Dal Seed	4	Mutton Piece	8
Insect	4	Glass Piece	2	Peanut	2
Safety Pin	2	Tamarind Seed	2	Ear Ring	2
Thermacol Ball	2	Rubber Piece	2	Tooth	2
Peanut	2	Metallic Screw	2	Fish Bone	6
Wheat Grain	4	Battery	2	Dal Seed	2
		Nose Ring	4		
		Peanut	4		
		Stone	2		
		Chalk Piece	2		

**Table-6: Mode Of Management**

Site Of Foreign Body	Mode Of Management/Procedure	No. Of Patients
Ear	Hartmann's Forceps, Probe	18
	Probe, Suction	4
Food Passage		
Tonsil	Tilley's Forceps	4
Vallecula	Oesophagoscopy	2
Cricopharynx	Oesophagoscopy	30
Oesophagus	Oesophagoscopy	10
Airway		
Nose	Jobson's Probe, Foreign Body Hook	26
	Diagnostic Nasal Endoscopy And Removal	2
Larynx	Laryngoscopy	0
Trachea	Bronchoscopy	0
Bronchi	Bronchoscopy	2
Total		100.00

**Discussion:** Foreign bodies in ear, nose and throat are common in children. Anatomically the foreign bodies get impacted at the narrowest part and cavities of the ear, nose and throat.

In the ear foreign body are most commonly seen and impacted at the junction of cartilaginous and bony part, isthmus and anterior recess. In the nose the foreign body usually gets lodged between nasal septum and inferior turbinate.

Thorns, pins, needles because of their pointed sharp tip, stick into the tonsillar fossa, tonsillar pillars, vallecula and laryngeal mucosa.

In the hypopharynx foreign bodies usually get lodged at the level of cricopharynx, which is the narrowest part of oesophagus.

In the oesophagus, the foreign bodies get impacted at three physiological constrictions-cricopharynx, aortobronchial constriction and at the level of diaphragm.

In larynx the foreign body usually gets impacted at the level of glottis but once the foreign body clears the sub-glottic region then it is most commonly seen in right lung.

**Age Incidence:** Our study showed most of foreign bodies in ear nose throat seen in children within age group of 0-10years. 70% patient foreign bodies seen age group of 0 to 10year<sup>1,2,4</sup>.

**Sex Incidence:** Our study showed Gender wise distribution of foreign body in ear nose throat was nearly same for both genders [Male to

female ratio was found to be 1.7:1 in study of 100 cases of foreign body ear nose throat]<sup>2,3</sup>.

**Site Of Impaction:** Our study showed 100 patients' ear had 22 patients, nose had 28patients, throat had 50 patients, out of which foreign bodies impacted at cricopharynx were 30<sup>6</sup>.

**Types of Foreign Bodies:** Our study showed out of 100 patients. Coin was seen in 28 patients, mutton bone in 8 patients, fish bone in 6 patients, screw in 2 patients, metallic ring in 12 patients, safety pin in 4 patients, insect in 4 and button battery in 2 of them<sup>4</sup>.

**Mode Of Management:** Our study showed 22 patients presented with foreign body in ear. In 18 patients they were removed on OPD basis<sup>2,3</sup>. Only in 4 cases they were removed in OT under general anaesthesia.

Out of 28 patients who presented with foreign body in nose, in 26patients foreign body was removed on OPD basis<sup>1,2</sup> and only in 2 case they were removed in OT under general anaesthesia. 4 cases presented with foreign body oropharynx. In all cases the foreign body was fish bone, lodged in the tonsillar fossa and were removed using Tilley forceps on OPD basis.

Our study showed we had only 2 cases of foreign body bronchi which were removed by rigid bronchoscopy under general anaesthesia<sup>5</sup>. Our study showed out of 78 cases of foreign body in aerodigestive system, excluding 28 foreign bodies found in nose, in remaining 44 patients

oesophagoscopy was done under general anaesthesia. 2 patients had foreign body in the valleculae, in 30 patients' foreign body was in cricopharynx and in 10 Patients foreign body was in the oesophagus. In 2 cases oesophagoscopy was negative for foreign body<sup>5,6</sup>.

**Conclusion:** Most of the foreign bodies in ear, nose and throat were seen in children within age group of 0-10 years. Gender wise distribution of foreign body in ear nose throat was nearly same for both genders.

Most of the foreign bodies in Ear and nose were diagnosed and treated on OPD basis. Those which were below the level of oropharynx required general Anaesthesia for their removal.

Most common foreign bodies in the ear were stones, seeds, and slate pencils, in the nose they were seeds, stone and sticks and in the throat, they were coins, mutton bones and needles.

In the removal of foreign bodies in the ear and nose, the complications were very few like tympanic membrane rupture and laceration of nasal mucosa.

The site of impaction, size and shape of foreign body played an important role to plan further management protocol.

Foreign body of the lower respiratory tract were associated with high incidence of mortality.

No foreign body in the upper aerodigestive tract should be left alone with the hope that it will come out spontaneously.

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