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Spectrum of Foreign Bodies inENT

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Abstract
Objectives: *To find the incidence and to analyze the various types of foreign bodies in ENT.*
Methodology: *This prospective study was undertaken in the department of otorhinolaryngology and head and neck surgery at Rohilkhand Medical College, Bareilly, U.P. All the cases of Pediatric foreign bodies(excluding airway and food passage foreign bodies) from Nov 2013 to Oct 2014wasundertaken in this study.*
Result*: Among 40 cases of foreign bodies in nose 26.66% subjects were between 3 to 10of age years, in ear out of 96 cases of foreign bodies 64% were between 1 to 14 years and in pharynx 9.33% subjects were between the age group 3 to 10 year. Most common foreign bodies wereinsects, cotton pieces, groundnut and tamarind seeds constitute half of vegetable foreign bodies.*
Conclusion: *Out of 150 cases of foreign bodies of ear, nose and pharynx, 96 cases (64%) were seen in ear; 40 cases (27%) were seen in nose and 14 cases (9%) were in pharynx. Out of all the foreign bodies, 144 (96%) foreign bodies were successfully removed in OPD with or without topical anaesthesia.*

I. Introduction

The removal of foreign bodies in children is very common in the otolaryngologists daily routine. Nasal foreign bodies are commonly encountered in emergency departments. Although more frequently seen in the pediatric setting, they can also affect adults, especially those with mental retardation or psychiatric illness. Children's interests in exploring their bodies make them more prone to lodging foreign bodies in their nasal cavities. In addition, they may also insert foreign bodies to relieve pre-existing nasal mucosal irritation .[1]As benign as nasal foreign body may seen, it harbors the potential for morbidity and even mortality if the object is dislodged into the airway.Foreign bodies can be classified as either inorganic or organic. Inorganic materials are typically plastic or a metal.Common examples include beads, button, stones, paper and small parts from toys.[2]

The most common pediatric foreign bodies are seeds of vegetables, nut, especially peanut, but resin, seeds and other nut are also common. Carrot and apple bites, sunflower and water melon seed, groundnut, popcorn, kernels, dried beans, dry fruits, accounts for much of the remainder of vegetable matter. Vegetable foreign bodies are more dangerous because their high fatty acid content cause acute inflammatory reaction.[3]

II. Material And Methods

This prospective study was undertaken in the department of otorhinolaryngology and head and neck surgery at Rohilkhand Medical College, Bareilly, U.P. All the cases of Pediatric foreign bodies from Nov 2013 to Oct 2014 was includedin this study.

Ear Foreign Bodies

Ear foreign bodies were removed by the following conventional methods:

A. Foreign bodies which were irregular, soft graspable and non- living objects such as dead insects, cotton wool, paper, small toys were removed by crocodile forceps or jobson's-horne probe.
B. Foreign bodies which were round, hard, smooth, non- graspable and non-hydrophilic such as beads, soft particles, toy gun pellets were removed by syringing.Foreign body impacted in the isthmus of external auditory canal were removed under general anesthesia by post aural route
C. **Nasal Foreign Bodies**.

Nasal foreign bodies were removed with a pair of forceps or by passing a blunt hook/ Eustachian catheter past the foreign body and gently dragging it forward along the floor.

In children and uncooperative patients, foreign bodies were removed under generalanaesthesia after endotracheal intubation and packing.

Observation

Out of 150 patients of foreign body ear, nose and pharynx, most common age group involved is 7-10 years. (53%)

Table I:-Age Wise Distribution

AGE GROUP(YRS)	NO. OF CASES	PERCENTAGE
UP TO 3 YR	6	4
3-6 YR	55	37
7-10 YR	80	53
11-14 YR	9	6
15-18 YR	0	0
TOTAL	**150**	**100**

It was observed that the relative incidence of foreign body was mainly encountered in children during 7-10 years (53%) and 3-6 years (37%) of age group.It was observed that incidence of ENT foreign bodies gradually diminishes as the age progresses.No case of foreign body was seen in the age group of 15-18 years (0 case)

TYPE	EAR	NOSE	PHARYNX	TOTAL	PERCENTAGE
VEGETABLE SEED	**12**	**17**	**3**	**33**	**22**
CD PLAYER BUTTON	**4**	**0**	**0**	**4**	**3**
INSECTS	**31**	**3**	**0**	**35**	**24**
FISH BONE/ CHICKEN BONE	**0**	**0**	**6**	**6**	**4**
PAPER ROLL	**7**	**1**	**0**	**8**	**5**
COTTON PIECE	**24**	**0**	**0**	**25**	**17**
STAPLER PIN	**1**	**0**	**1**	**2**	**1**
PLASTIC BALL	**1**	**1**	**0**	**2**	**1**
PEARL	**5**	**0**	**0**	**5**	**3**
WOODEN STICK PIECES	**5**	**0**	**3**	**8**	**5**
THERMACOL PIECE	**1**	**3**	**0**	**4**	**3**
BRICK STONE PIECE	**1**	**1**	**0**	**2**	**1**
PIECE OF PLASTIC	**0**	**8**	**0**	**8**	**5**
RUBBER PIECE	**0**	**4**	**0**	**4**	**2**
BUTTON PIECE	**0**	**2**	**0**	**2**	**1**
PENCIL TIP	**1**	**0**	**1**	**2**	**1**
WIRE PIECE	**3**	**0**	**0**	**3**	**2**
TOTAL	**96**	**40**	**14**	**150**	**100**

III. Conclusion

- Foreign bodies in ear mainly were insects and cotton pieces.
- Groundnut and tamarind seeds constitute half of vegetable foreign bodies in nose.
- Next frequent foreign bodies were fish bone and these were found in oropharynx.

IV. Discussion

The present study has been undertaken to evaluate the pattern of ENT foreign bodies (excluding airway and food passasge foreign bodies, presenting in a tertiary care teaching hospital of western up.

Age And Sex Incidence

In this study, highest incidences of foreign bodies among 150 cases of ear, nose and throat were seen in the children below 10 years between the age of 7-10 years 80 (53%) and between 3-6 years 55 (37%) cases were seen.

In a similar study conducted by Santanu Banerjee et al (1999)[8], the highest incidence of foreign bodies was seen in children below 10 years in 94 cases (52.5%).

In this study, Incidence of foreign body in air and food passage shows male predominance as compared to female in ratio of 1.6:1.

Case Distrubution

In the present study, out of 150 patients there were 96 patients of foreign bodies ear, 40 patients of foreign bodies nose, 14 patients of foreign bodies pharynx.ChiunKian Chai et al (2012)[9]found the incidence of foreign bodies of ear to be highest among foreign bodies of ear, nose and throat.we found foreign bodies to be

more frequent in Right ear (58%)/ Right nostril (47%), probably due to the fact that majority of right handed persons tend to introduce foreign bodies in right side.

Santanu Banerjee (1999)[8]in an evaluation of patients of foreign bodies in ear , nose and throat in children observed that right side was frequently involved in over 50% of patients.

V. Summary & Conclusion

This study consisted of 150 cases ENT foreign bodies, out of which 96 foreign bodies were seen in the ear. The most common age group was between 7-10 years age group.Out of 150 cases of foreign bodies of ear, nose and pharynx, 96 cases (64%) were seen in ear; 40 cases (27%) were seen in nose and 14 cases (9%) were in pharynx.Out of all the foreign bodies, 144 (96%) foreign bodies were successfully removed in OPD with or without topical anaesthesia.

- Out of 150 cases, 96 cases (64%) were found to be of foreign bodies in ear. Commonest foreign body in ear was insects followed by groundnut and tamarind seeds and the common symptom was ear discharge.
- Right ear was more involved than left.
- Out of 40 cases (27%) of foreign bodies nose, most common foreign bodies were vegetable seeds followed by .plastic pieces and werecommonly found in right nostril and common symptom of foreign body in nose was nasal discharge followed by blockage.
- Most common symptom of foreign body in throat was pain in oropharynx.

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