

PREVALENCE OF FOREIGN BODY AS AN OTORHINOLARYNGOLOGY EMERGENCY AT TERTIARY CARE CENTER OF CENTRAL NEPAL

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**ABSTRACT**

Introduction: Ear, nose and throat foreign bodies are commonly encountered by otolaryngologists, pediatricians and primary care physicians mostly in emergency setup. The objective of this study is to find out the prevalence of aerodigestive and aural foreign bodies as an ENT emergency in tertiary care center of Central Nepal.

Materials and Methods: This was a nine-month hospital based descriptive cross-sectional study performed in the Department of Ear, Nose and Throat (ENT) from June 2021 to March 2022 after approval from the Institutional Review Committee. Data was collected from emergency procedure record book and operation theatre register, entered and analyzed by using descriptive statistical methods.

Result: Out of 300 cases presenting as an ENT emergency during the study time, 54 cases happened to be aerodigestive and aural foreign bodies which account for one-sixth of the ENT emergency case load, majority occurring in pediatric age group, and nasal foreign bodies being the most common type.

Conclusion: We conclude from our study that foreign bodies in ENT mostly present as an emergency condition with more prevalence in pediatric population and they account for about one-sixth of the ENT cases presenting as an emergency.

Keywords: Ear; Foreign body; Nose; Throat.

INTRODUCTION

A Foreign Body (FB) is any object that is present in a region where it can cause harm by its presence if immediate medical attention is not sought.¹ Foreign bodies in ENT commonly present as an emergency mostly in pediatric population. FB commonly occur in young children due to various factors like curiosity to explore orifices, boredom, imitation, playing, mental retardation.² It also counts to negligence and haste. The objective of this study is to find out the prevalence of aerodigestive and aural foreign bodies as an emergency in tertiary care center of Central Nepal.

MATERIALS AND METHODS

It was a hospital based descriptive cross-sectional study done at National Medical College and Teaching Hospital from June 2021 to March 2022 after approval from Institutional Review Committee, National Medical College and Teaching Hospital (Ref No. F-NMC /520/077-078). First, we reviewed the number of cases presenting in Emergency as foreign body that underwent intervention at our hospital from the previous fiscal year record and found out the number to be 50, so we took the sample size to its nearest figure i.e., 54 and samples were selected by universal sampling method fulfilling the inclusion criteria.

Inclusion criteria:

1. Patients presenting with ENT foreign bodies within 7 days
2. Any age and sex
3. No prior intervention done elsewhere
4. No serious co-morbid conditions

Exclusion Criteria: Patients not willing to take part in the study

Procedure for foreign body removal

1. Foreign body in ear: Most cases of foreign body in ear were removed either syringing of the ear or by using foreign body hook in the emergency procedure room.

2. Foreign bodies in nose: Nasal foreign bodies that were seen on anterior rhinoscopy were removed with foreign body hook under local anesthesia in emergency procedure room whereas foreign bodies that were impacted and distally placed were removed in the operation theatre using nasal endoscope under general anesthesia.

3. Foreign body in Throat and Upper Esophagus: Almost all the cases required rigid esophagoscopy and foreign body removal under general anesthesia.

Cases done under local anesthesia were discharged on the same day whereas cases done under general anesthesia were discharged usually one day after the procedure.

The data was recorded and analyzed using MS Excel and SPSS version 16 software.

RESULTS

A total of 54 cases presented with complaints of lodged FBs of ear, nose, and throat during the study period. 31 cases (57.4%) FBs were extracted at the outpatient department under local anesthesia. Remaining 23 (42.6%) in whom FB removal attempt was failed and/or uncooperative younger children were managed in the operating room under general anesthesia.

There were 29 (53.71%) male and 25 (46.49%) female patients with a male to female ratio of 1.16:1. The age was ranged from 1 year to 72 years old with a mean age of 6 years.

Table 1: Distribution of ENT foreign bodies by site and age group

| Site | Age group | | | Total |
|------------|-----------|------|----------|-------|
| | 0–5 | 6–30 | Above 30 | |
| Throat FBs | 5 | 5 | 4 | 14 |
| Ear FBs | 8 | 5 | 2 | 15 |
| Nose FBs | 22 | 3 | 0 | 25 |
| Total | 35 | 13 | 6 | 54 |

DISCUSSION

The present study considered patients examined for ENT FBs in the emergency in a tertiary referral hospital for nine months (from June 2021 to March 2022). The 54 cases of ENT FBs accounted for 16 % of all patients examined in the ENT emergency services during this period. According to the literature, FBs account for ~11% of the cases observed in ENT emergency services.^{1,2,3} The prevalence of foreign bodies in ENT is more here than the other study which reflects the lack of knowledge, negligence and low-quality care given usually to the children in this part of our country.

In the present study, FBs were more prevalent in children. 64.8 % of the patients were of age less than 5 years. These findings are in agreement with the literature and with reports of FBs being more common in children around 5 years of age.^{5,6,8} This was the peak age group in which children started to explore their surroundings with their senses that might be the underline reason of high prevalence of FB in this age group.

Many studies in the literature reported aural FBs as the most prevalent.^{1,2,3} On contrary to this, our study revealed nasal foreign bodies to be more prevalent in our region which is supported by some other studies.^{4,7}

The FBs were generally found in males (53%) more than in females (47%) which is also supported by other studies.^{1,2,4,8}

CONCLUSION

We conclude from this study that foreign bodies in ENT are prevalent with significant percentage (18 % in our study) among all ENT emergencies and carries high morbidity aiming pediatric population with males and nasal foreign bodies in higher proportion. Most of the cases can be managed by removal under local anesthesia.

LIMITATIONS

It is a descriptive hospital-based study with a small sample size which may not represent the total population.

REFERENCES

1. Parajuli R. Foreign bodies in the ear, nose and throat: an experience in a tertiary care hospital in central Nepal. *Int Arch Otorhinolaryngol*. 2015 Apr;19(2):121-3. [DOI]
2. Shrestha I, Shrestha B L, Amatya R CM. Analysis of ear, nose and throat foreign bodies in Dhulikhel hospital. *Kathmandu Univ Med J (KUMJ)* 2012;10(38):4–8. [DOI]
3. Silva B SR, Souza L O, Camera M G, Tamiso A GB, Castanheira L VR. Foreign bodies in otorhinolaryngology: a study of 128 cases. *Int Arch Otorhinolaryngol*. 2009;13(04):394–399. [Full Text]
4. Mukherjee A, Haldar D, Dutta S, Dutta M, Saha J, Sinha R. Ear, nose and throat foreign bodies in children: a search for socio-demographic correlates. *Int J Pediatr Otorhinolaryngol*. 2011 Apr;75(4):510-2. [DOI]
5. Chiun KC, Tang IP, Tan TY, Jong DE. Review of ear, nose and throat foreign bodies in Sarawak General Hospital. A five-year experience. *Med J Malaysia*. 2012;67(1):17-20. [Full Text]
6. Ibekwe MU, Onotai LO, Otaigbe B. Foreign body in the ear, nose and throat in children: A five-year review in Niger delta. *Afr J Paediatr Surg*. 2012 Jan-Apr;9(1):3-7. [DOI]
7. Bakhshae M, Hebrani P, Shams M, Salehi M, Ghaffari A, Rajati M. Psychological status in children with ear and nose foreign body insertion. *Int J Pediatr Otorhinolaryngol*. 2017; 92:103-7. [DOI]
8. Ray R, Dutta M, Mukherjee M, Gayen G C. Foreign body in ear, nose and throat: experience in a tertiary hospital. *Indian J Otolaryngol Head Neck Surg*. 2014;66(1):13-6. [DOI]