Foreign bodies in ENT in a teaching hospital in Eastern India

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Abstract

Objective To evaluate the nature, common sites, modes of presentation of various foreign bodies (FB) in Ear, Nose and Throat (ENT).

Materials and methods Observational retrospective study carried out at Vivekananda Institute of Medical Sciences, Ramakrishna Mission Seva Pratishthan. The study period was between Jan 2006 to Jan 2007. The information obtained from the hospital record books.

Results Four hundred and eighty-two patients presented in the Department of Otorhinolaryngology of Vivekananda Institute of Medical Sciences, in the study period with FB in their ENT. Out of 482 pts, the commonest location of FB was to be in throat with 302 pts (62%) followed by ear with 119 pts (25%) and nose 61 pts (13%). Amongst the FB in throat the commonest was fish bone and the commonest site being tonsils. Artificial denture accounted for a significant number of 13 (4.3%). External auditory canal was the commonest site of FB lodgment in ear found in 118 patients (99.16%). Nasal FB were found in 61 patients; more common in pediatric age group (98.36%).

Conclusion From this study we have found that FB lodgment is a very common complaint with which patients come to otolaryngologist. The commonest site of FB lodgment is in the throat. Most of the FB could be removed in emergency room (ER) with or without Local Anesthesia.

Keywords Foreign bodies · Fish bone · Pediatric age group

Introduction

A foreign bodies (FB) in ear, nose and throat (ENT) is any object which is placed in the ENT that is not meant to be there and it can cause harm by its mere presence if immediate medical attention is not sought.

FB may be classified as animate and inanimate. The inanimate FB can again be classified as vegetative and non-vegetative FB, and hygroscopic and non-hygroscopic.

Methods

Observational retrospective study carried out in the Department of Otorhinolaryngology and Head Neck Surgery, Vivekananda Institute of Medical Sciences, Ramakrishna Mission Seva Pratishthan, Kolkata. The study population includes the number of patients presenting with FB in the Out Patient Department or in the Emergency in the study period of 1 year (Jan 2006 to Jan 2007). The data obtained from the hospital record books.

Observations

Number of patients who have come to this hospital with FB in ENT during the mentioned period are 482 of which 302 were males and 181 were females.

The number of FB found in ENT were 119, 61 and 302 respectively their percentages being 62%, 25% and 13%.

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Foreign bodies in ear

In the study 119 patients presented to the hospital foreign with bodies in their ears. Twenty-four patients (20%) harboured living FB. These were mostly insects in the form of cockroaches, beetles and most of these cases seen to come during summers. Four patients had maggots in their ears of them three had unsafe ear disease and the fourth patient had malignant ear disease. The rest 95 had non-living FB in their ears. Eighty-five patients (71.43%) non-living non-hygroscopic FB in the form of broken match sticks which being the most common. The others were cotton, beads, and pieces of rubber mostly seen in children. 10 patients 8.4% had non-living hygroscopic FB in the form of peanuts and grams.

Twenty percent of the patients were children <10 years.

The most common site of is the external auditory canal, and in one patient the FB was found to be impacted in the ear lobule.

Most of these FB were removed in the OPD or in the ER under local anesthesia (LA). In 3 children the FB were found impacted and required removal under general anesthesia (GA).

Foreign bodies in nose

Sixty-one patients had FB lodged in their nose. Fifty-nine patients (96.72%) had non-living FB and only 2 patients (3.28%) harboured living FB. Of the two patient one was an adult who had a fungating growth in the nasal cavity and harboured maggots.

Of the total number of 61 patients 60 pts i.e. 98.36% were of the pediatric age group.

80.32% of the pediatric patients presented with h/o FB insertion nose, while 19.68% patients came with the complaint of unilateral foetid discharge, which was later, revealed to be forgotten FB.

Usually typical history provides clue for clinching the diagnosis but at times when the patient was unable to give any typical history and a FB lodgement was suspected X-ray/CT scan was done to localize the FB.

Most of the FB were removed in the ER or OPD under local anesthesia and only 5 cases i.e. 9.8% required removal under general anesthesia.

Foreign bodies throat

This group of patients was by far the most common with 302 patients presenting in the study period. In the study period only one case of living FB was found the rest were all non-living FB.

Amongst the non-living FB fish bone was found to be the commonest in 280 cases i.e. 92.72%. Coming to the sites of lodgement it was found that tonsillar bed 218 (72.19%) was the commonest followed by base of tongue 47 (15.56%), vallecula 22 (7.28%) and esophagus 15 (4.97%).

Forty-eight percent of the patients who had come with FB throat were children <10 yrs.

Clinical examination was the mainstay. In cases of esophageal FB X-rays plain and soaked in Barium cotton pledget was done to get help in the exact site determination.

Most were removed in ER under LA. 15 cases of esophageal FB required were removed under GA.

Discussions

Highest number of FB were found in throat (302) followed by ear (119) and nose (61) in this study. Usual FB include coin, bone piece, fish bone, nails, button, glass pieces, dentures, ear ring, chain, pins and needles as per the studies conducted by Nandi and Ong (1978) [1], Phillips and Patil (1988) [2], Kamle and Bindary (1990) [3].

In our study the most common site of FB lodgement had been Throat which is in corroboration with the study of Phillips and Patil [2] conducted in 1988. More over the most common FB was Fish Bone as per our study. This may be due to the fact that people in this part of the country are especially fond of fish.

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 [4]. In this study 98.36% of patients with nasal FB were children.

Most of the FB have been removed in ER, with 20 patients requiring GA for removal. Of them most were children with impacted FB in esophagus and ear canal [5, 6].

Conclusion

From this study we have found that FB lodgement is a very common complaint with which patients come to otolaryngologist. The commonest site of FB lodgement is in the throat. Most of the FB could be removed in ER with or without local anesthesia. Fish bone is the commonest FB found in this study reflecting the food habits of the people in this region.

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