ORIGINAL ARTICLE

Foreign Bodies in the Nose

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ABSTRACT

Background: *Nasal foreign bodies occur most frequently in children and most times first present to the emergency physicians. It poses a challenge to the Otorhinolaryngologist when tampered with. The objective of this paper is to determine the pattern of foreign bodies lodged in the nasal passages in Port Harcourt with a view to documenting the types and highlighting the results of management.*

Methods: *A retrospective study was done using 134 patients who presented with foreign bodies in the nose to the Ear, Nose and Throat clinic of the University of Port Harcourt Teaching Hospital (UPTH) and Benok Consultants Clinic both in Port Harcourt over an eight-year period from January 1993 to December 2000.*

Results: *One hundred and thirty four patients were seen with a male female ratio of approximately 1:1. Age range was 1-21-years with a mean of 3.23 years ± 2.48 [SD] and mode of 2-years. The children within the age group 2-4 years had the highest incidence. The right side of the nose was more involved than the left with only one bilateral case noted. The foam was the commonest foreign body found. Most patients presented within the 1st day with only 15 presenting late. Most were removed in the clinic under good illumination, only 6 had to undergo examination under anaesthesia (EUA) in the theatre and these were the uncooperative patients.*

Conclusion: *Foreign body in the nose is an emergency only as far as it concerns anxiety to the relations. It presents no problems in management to the Otorhinolaryngologist*

KEYWORDS: Foreign Bodies; Nose; Port Harcourt.

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INTRODUCTION

Foreign bodies in the nose are quite common, especially in children [1,2]. It is such a common entity that it is uncommon to pay much attention to it. Occasionally, an unusual foreign body may be encountered either in terms of prolonged stay or difficulty in identification and removal, when suspected. Most Otorhinolaryngologists will remove the foreign body as they occur without much attention, and do not pose much problems to remove. In an epidemiological review of Otolaryngology in South-Eastern Nigeria, 140 cases were noted on account of their numbers but lacked enough distinctive features to merit further treatment[3].

A remarkable diversity of foreign bodies has been found in the nose. Any article small enough to be admitted into the anterior nares, had at one time or the other been removed from the nose [1,2,4-6]. The foreign body could be inanimate or animate foreign bodies. The list of inanimate objects removed from the nose is endless and include paper, foam, erasers, beads, beans, nuts, stone, crayon and chalk. Other authors have reported pins, shrapnel, pieces of wood, fishhook, bullets, pieces of cloth, safety pins, corks and earrings[5]. Animate foreign bodies are usually maggots and larvae, which are quite common in warm tropical climates. Insects deposit their eggs on the debris of some children's nose and as such worm (larva) can be found during metamorphosis[4]. Screw worms (which are the larval stage of Cochliomya macelleria and the Cochliomyia homnivorax, “the blow fly”) are serious pests to man and cattle in Texas[7].

Round worms have been documented in the literature[4, 5,6]. The reason for finding such is not far fetched. Adult worms from the gastro-intestinal tract sometimes are lodged in the nose as a result of violent and forceful vomiting and regurgitation.

Indeed, many instances of nose disease of undetermined aetiology are sometimes due to foreign bodies. Children under the age of five are commonly involved[2, 8,9,10]. This paper therefore reviews foreign bodies in the nose in order to determine the types and outcome of management.

PATIENTS AND METHODS

This was a retrospective study. The material resource was the clinic records of first attendance at the Ear, Nose and Throat (ENT) units of the University of Port Harcourt Teaching Hospital (UPTH) and Benok Consultants Clinic, over an 8-year period from January 1993 to December 2000.

Ward records, theatre records and patient case notes supplemented information from these sources.

The data obtained from the records included demographic data, types of foreign bodies, side of the nose involved and treatment given. Data was analysed using SPSS 11.0 version and presented in simple

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statistical tables and figures.

The patients were mostly referred to the ENT units from medical practitioners around Port Harcourt. Some came directly without referral. Residents saw some of the patients, but the consultant Otorhinolaryngologist saw the majority. Foreign bodies were either removed in the clinic under good illumination with appropriate instruments or in theatre under general anaesthesia in those that were uncooperative.

RESULTS

A total of 134 patients were seen and found to have foreign bodies in the nose out of 20, 373 patients that presented to the ENT Units for the period of study, which represents 0.66% of the total population of ENT patients. There were 65 males and 68 females giving a M: F ratio of approximately 1:1 Table I shows the sex distribution of the patients.

Figure 1 show's a histogram illustrating the age group incidence of the patient. The mean age was 3.23 years ± 2.48 [SD] with a range of 1-21years.

Patients within the age range 2-4 years accounted for 47.01% of all cases. Also within this age group was the peak incidence of 2 years of age.

The right nose was involved in 76 cases (56.72%) while the left was 45 cases (33.58%). Bilateral involvement was seen in one patient (0.75%). The side involved in 12 cases were not recorded. Figure 2 shows's a bar chart illustrating the side of nasal cavity involved.

The commonest foreign body recorded was foam, which occurred in 19 cases (14.28%) followed by maize 15 cases (11.19%), bread pieces 14 cases (10.45%), and crown cork lining 14 cases (10.45%). The type of foreign body was not specified in 31 cases (23.13%). Table II shows the type of foreign bodies impacted in the nose. One hundred and twenty four cases (92.54%) were removed in the clinic under direct vision. Six cases (4.48%) were examined and the foreign body removed under anaesthesia in the theatre. Four cases absconded after being seen in the clinic and never came back for removal. Figure 3 shows site of disposal. Twenty seven cases had previous failed attempts at removal by patients' relations and primary care providers before presentation.

The only complication encountered was bleeding during and after removal of foreign bodies. In all the cases bleeding was minimal and stopped spontaneously.

Table I. Sex Distribution of the Patients

SEX	NUMBER	PERCENTAGE
Male	65	48.51%
Female	68	50.75%
Not Specified	1	0.74%
TOTAL	134	100

Table II. Types of Foreign Body

TYPE OF FOREIGN BODY	NUMBER	PERCENTAGE
Foam	19	13.86%
Maize	15	10.95%
Bread pieces	14	10.22%
Crown Cork Lining	14	10.22%
Stone	7	5.12%
Chalk	5	3.65%
Paper	5	3.65%
Bean seed	5	3.65%
Eraser	4	2.92%
Crayon	4	2.92%
Peanut	3	2.19%
Biro cover	3	2.19%
Plastic material	3	2.19%
Camphor	2	1.46%
Kola nut	1	0.73%
Wire coating	1	0.73%
Orange seed	1	0.73%
Not specified	31	23.13%

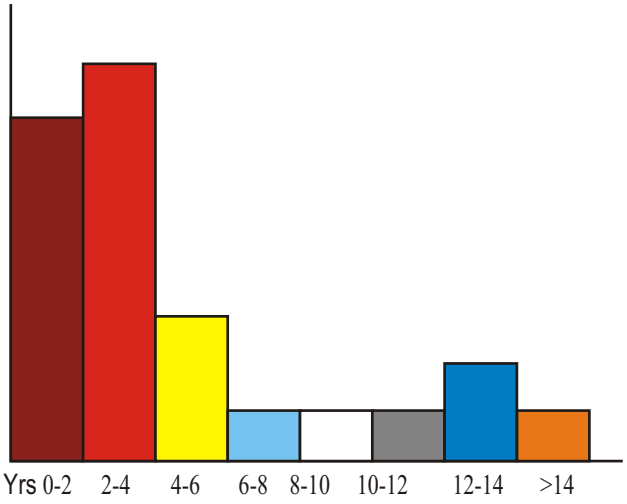

Figure 1. Histogram Illustrating Age Group incidence of the patient

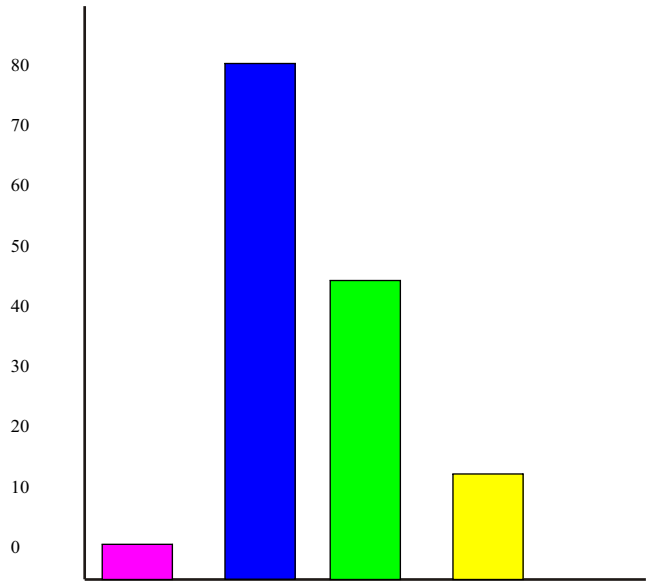

Fig. 2. Bar Chart Illustrating Side of Nasal Cavity Involved

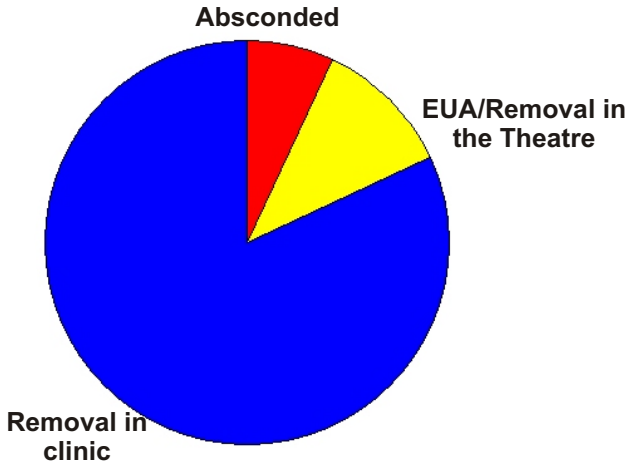

Figure 3: Pie Chart Illustrating Site of Disposal

DISCUSSION

The impaction of foreign bodies in the nose had typically been recognized as a health problem of children and some adults that are mentally deranged. Myiasis has been documented in people with poor hygienic standards[3], [5]. In our study there were no seasonal variations as to the type of foreign bodies seen in the nose, as most of the foreign bodies were objects that are available all round the year.

The reasons for inserting foreign bodies into the nose range from curiosity, through boredom to outright mischief [9]. The patient could have inserted the foreign body himself or a mate did it for him.

Children typically present soon after someone observes them placing an object into their nose. Sometimes they admit to parents that they have inserted something into their nose. At other times, they deny for fear of being reprimanded or punished. Many times the history is obscure and the child presents with a purulent unilateral nasal discharge, which is classic of delayed presentation. The time interval between insertion and presentation did not seem to matter much since the basic treatment was the same and there were no complications attributable to prolonged stay of the foreign body in the nasal cavity in our study.

It is important to mention that the parents of the child come with panic in most cases. This had resulted in demanding immediate removal from primary health care providers who are not competent to handle this, but dabble into an attempt at removal at the insistence of the parents. This may result in failure but then sensitizes the child, who now becomes more agitated at any attempt later to remove the foreign body. Although not observed in our study it is possible that the foreign body could be pushed into the nasopharynx of a child who at the time would be crying and struggling with the unfortunate consequence of being inhaled into the respiratory tract.

In this study it was found that children within the age group of 24 years had the highest incidence. The highest frequency occurred in children at 2-years of age. The age group 2- 4 years is the period the child begins to explore the environment and as such they tend to put foreign bodies into their orifices. This finding corroborates with the work done in other parts of the Country[2,8].

There was a predilection for foreign bodies to be lodged in the right side probably because most patients were right handed. The sites of impaction of these foreign bodies in the nose were not recorded. All our patients presented with clearly visible foreign bodies in the nose, there were no need for radiological investigations.

The types of foreign bodies commonly encountered were the same with the types reported by other workers[2, 45,6,8]. However, the commonest type recorded was foam, which occurred in 14.28%, although 31 cases, which accounted for 23.13%, were not specified. The objects encountered commonly were very accessible to the children. They are commonly found in the environment[2]. The seeds of fruits, which are prevalent in the tropics, and school items, predominated.

Most of the cases (92.54%) were successfully removed in clinic under direct vision while only 4.48%, of cases were removed in the theatre. This corroborates other reported series that the Otorhinolaryngologist can easily handle foreign bodies in the nose [3-6,8-11]. It poses problems only to the inexperienced and anxious health worker who might convert a simple case into an

emergency by pushing it into the nasopharynx from where it could fall and be inhaled into the Larynx or Tracheo-bronchial tree.

Safety precautions are the best ways to prevent children from putting foreign objects into their nasal orifices. Parents should toddler proof their homes, storing electronic small batteries in a locked cabinet and furniture that are made of foam materials should be completely covered. Writing material like chalk, and the use of crayons should be discouraged and substituted with other material that are not suitable for insertion into their orifices. In addition, the use of beads in the braiding of female children's hair should be discouraged.

CONCLUSION

Foreign bodies in the nose are emergency cases only as far as it concerns anxiety to the relations. It can be handled effectively by the specialist without complications.

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