

Nasal Foreign Body in Port Harcourt

* DR. NWOGBO A.C

AND

DR. OJULE I.N

*UNIVERSITY OF PORT HARCOURT TEACHING HOSPITAL

**PREVENTIVE AND SOCIAL MEDICINE DEPARTMENT UNIVERSITY OF PORT HARCOURT TEACHING HOSPITAL

CORRESPONDENCE: DR. NWOGBO A.C
UNIVERSITY OF PORT HARCOURT TEACHING HOSPITAL

ABSTRACT

Background

Nasal cavity foreign body is a common ENT emergency especially in children. Diagnosis is often made with anterior Rhinoscopy. Urgent removal is required to avoid complication.

Materials and Methods

Case notes of 113 children who had nasal foreign bodies removed between January 2018 and December 2022 in ENT Department of University of Port Harcourt Teaching Hospital, were retrieved for analysis.

Results

A total of 113 children were involved in this study, 64(56%) males and 49 (43.4%) female with male:female ratio of 1.2:1.

Most common foreign body removed was beads, followed by grains/seeds. General anaesthesia and endotracheal intubation was needed in very few severely impacted cases.

Aim

The aim of this study is to evaluate the pattern of nasal foreign bodies, treatment modality in a tertiary centre.

Conclusion

Nasal foreign body is a common and challenging ENT presentation. Early presentation for treatment/removal will prevent complication.

Keyword

Foreign body, Nasal cavity, Button battery.

Date of Submission: 26-03-2023

Date of Acceptance: 08-04-2023

I. Introduction

Presence of foreign body on the nasal cavity of any child is a common ENT emergency. When this occurs, parents are most anxious and concerned as the child show no anxious moment.

Children below age four (4) years are mostly affected as they tend to explore their various orifices at the age group ¹.

Objects found in this condition is variable, depending on the environment the child finds himself or herself and the nature of food the child feeds on as they tend to insert these items into the nose ². As a result, in some cases piece of meat, beans have been extracted from the nasal cavity. Screw nuts seen in the nose of children whose parents are motor mechanics. Presentation to appropriate care giver is also important as complication may arise if the care giver is untrained in the management of this condition. Sometimes foreign bodies had been pushed further into the nasal cavity in an attempt to remove it. This may pose some complication in the process of management of these case ³.

Appropriate instrumentation is also required for a successful removal as the usage of any instrument is dependent on the nature of the foreign body to be removed. A simple forcepcannot perform the procedure successfully when removing a smooth rounded bead, as this may roll in during the process ^{4,5}. Parent should also be advised to keep away these objects out of reach of children. The aim of this study to evaluate the pattern of nasal foreign bodies, treatment modality and the outcome in a tertiary centre.

II. Material and Method

This is a retrospective study of nasal foreign bodies in the ENT Department of University of Port Harcourt Teaching Hospital. Study was carried out between January 2018 to December 2022 and children were mostly affected. The case files of these patients were retrieved from medical record, ENT clinic and children ward. 113 children were considered, 64 (53%) males and 49 (43.4%) females. Majority of them had history of foreign body insertion into the nose as they visited the department.

Information recorded from the folders included gender, age, type of foreign body and duration before presentation. All the information were recorded on table and analysed.

III. Results

Total number under consideration were 113, 64 (male) 56% and (43.4%) 49 females. Beads topped the list, 40%, followed by grains/seeds (13.3%). The lowest were plastic toy parts and screw nut with 2.6% each, as represented on table III. Majority of foreign bodies were removed within age range 3-5, 53%, followed by age range 0-2 (27.4%).

Some cases had complication already before presentation which was stated on table II. Highest was trauma to the nasal wall. This is due to their presentation to other care giver before presenting to our centre.

Table I: Age Group and Number of Cases

Age Group (Years)	Number of Cases	Percentage (%)
0 – 2	31	27.4
2-4	60	53.09
4-6	10	8.8
6-8	6	5.3
8-10	4	3.5
>10	2	1.7

Table II: Complication Recorded in First Visit

Complication Recorded in First Visit	Number of Cases	Percentage (%)
1. Trauma to Nasal Wall	22	19.5
2. Infection	10	0.88
3. Foreign body pushed further in	5	4.4
4. Haemorrhage	13	11.5

Table III: Distribution according to type of foreign body

Objects	Number of Cases	Percentage (%)
Beads	46	40.7
Grain/Seeds	15	13.3
Button Battery	5	4.4
Corn Seed	12	10.6
Beans	8	7.0
Stones	5	13.3
Eraser End	7	6.2
Paper	5	13.3
Piece of meat	4	3.5
Plastic Toy Piece Part	3	2.6
Screw Nut	3	2.6
TOTAL = 113		

IV. Discussion

Nasal foreign bodies are common ENT emergency in every centre. Failure to remove them may cause complications like aspiration and subsequent upper airway obstruction⁵.

Children are mostly affected. In our study children within age range of 2-4 topped the list (60) 53.09%. This was followed by age group 0-2 (31), 22.4%⁶.

This agrees with Ricardo et al in their 420 cases of nasal foreign bodies. Also Abou-Elfadl et al in their 260 cases of nasal foreign bodies had highest number in age range of 2-4 years^{6,7}.

Beads are rounded foreign body which is available in most homes. Children easily access this object and insert it in the nose. It is the highest in the list 46 (40.7%). This is closely followed by grains and seeds which counted 15 (13.3%). Screw nuts and plastic toy parts were low on the list⁸.

The presence of button batteries, must be highlighted as this group of batteries are commonly being inserted into the nose by children^{9,10}.

It accounted to (4.4%) 5 in the list. This is most important as it causes liquefactive necrosis of nasal mucosa, due to alkaline solution it releases when it encounters mucosal fluids¹⁰.

This is recorded on table III. The first presentation to care giver, determines the success of removal. Presentation to unskilled hands may result to some complications.

On table II, we received some patients with complications as stated. Trauma to nasal wall is the first on the list with 19.5% (22), followed by haemorrhage 13 (11.5%)¹¹.

Early referral to specialist centre will enhance treatment/removal.

Removal involved appropriate forceps/instruments. Beads required curved forceps that will go above the foreign body like beads. Impacted foreign body like screw nuts required anaesthesia¹².

Therefore, in some cases, general anaesthesia with endotracheal intubation was used to remove foreign body, as it was not possible to carry out the procedure in clinic¹³.

V. Conclusion

Nasal foreign bodies are common ENT emergencies. Early removal is mandatory to avoid complication. Objects that are easily inserted into the nose should be removed from the reach of children and parent must be advised to access a specialist centre when the need arises.

References

- [1]. Chan TC, Ufberg J, Harrigan RA, Vike GM, Nasal foreign body removal. *The Journal of Emergency Medicine*. 2004;26(4):441-5.
- [2]. Fernando P. Perforation of nasal septum due to button battery lodging in nose. *Br Med J* 1987;294:742-743.
- [3]. Kalan A, Tariq M. Foreign bodies in the nasal cavities: a comprehensive review of the aetiology, diagnostic pointers and therapeutic measures. *Post graduate medical journal* 2000;76 (896):484-7.
- [4]. Mc Rae D, Premachandra DJ, Gatland DJ. Button battery in the ear, nose and cervical oesophagus: a destructive foreign body. *The Journal of Otolaryngology*. 1989;18(6):317-9.
- [5]. Baskshi SS, Coumare VN, Priya M, Kumar S. Long term complications of button battery in the nose. *The journal of emergency medicine*. 2016;50(3):485-7.
- [6]. Ricardo RF, Andrea AA, Arthur O, Shiro T. Nasal foreign body' description of types and complications in 420 cases. *Bras. J otolaryngol*. Vol. 72 (1), Jan – Feb 2006, 18-23.
- [7]. Abou-Efadi M, Horra A, Abada RL, Mahtar M, Roubal M, Kadir F. Nasal foreign bodies: Results of a study of 260 cases. *Europe Annal Otolaryngol*. Vol 132(6). Dec 2015,343-346.
- [8]. Cohen HA, Goldberg E, Horev Z. Removal of nasal foreign bodies in children. *ClinPadiatr (phila)*, 32 (1993), p. 192.
- [9]. Jatana KR, Litovitz T, Reilly JS, Koltai PJ, Rider G et al. Paediatric button battery injuries. 2013 task force update. *International journal of paediatric Otorhinolaryngology* 77: 1392:1399.
- [10]. Mohammed HT, Waleed MB, Sherif A. Button Battery foreign bodies in children. Hazards, management and recommendation. *Biomed research international volume* 2013, Article ID 846091.
- [11]. Francois M, Hamrioui R, Narcy P. Nasal Foreign bodies in children. *Eur Arch Otorhinolaryngol*1998;255:132-133.
- [12]. Kadish HA, Corneli HM. Removal of nasal foreign bodies in the paediatric population. *Am J Emerg Med* 1997;15:54-56.
- [13]. Tong MC, Ying SY, Van Hasselt CA. Foreign Bodies in children. *Int J PaediatrOtorhinolaryngol* 1996;255:132-133.

DR. NWOGBO A.C, et. al. "Nasal Foreign Body in Port Harcourt." *IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)*, 22(4), 2023, pp. 28-30.