

An audit of ear, nose and throat (ENT) foreign bodies in adult patients in enugu south east Nigeria

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Abstract

Introduction: Foreign bodies in ENT in adults are rare; but are mostly encountered by otorhinolaryngologist. From personal experience adult patients usually present with complaint of specific foreign body lodged accidentally in the ear, nose or throat. However certain types of foreign bodies in ENT in adult patients may show some negative habitual activities in the society. The study was carried out to analyse the types of ENT foreign bodies found in adults and ways to prevent its occurrence in the society.

Materials and method: This was a retrospective descriptive study carried out in adult patients with ENT foreign bodies seen in Department of ENT, College of Medicine, Enugu State University of Science and

Technology Parklane from 2013 – 2015. Types of Foreign Bodies and method of removal were analysed.

Result: Out of 98 patients evaluated, 27 patients (27.6%) were adult while 71(72.4%) were children. Of the adult patients seen, 11 were male and 16 female in the ratio of 1:1.45. Majority of the Foreign bodies were seen in the ear 26(96.3%), followed by throat 1(3.7%) and non-occurred in the nose. Cotton bud was the commonest foreign body with 16(59.3%). Followed by insects 7(26%). Others include bead, ear ring, and cotton wool with 1 each respectively (3.8%). All the foreign bodies were found in the ear. The only foreign bodies found in the throat were fish bone. The foreign bodies in the ear were removed either by syringing method 21(80.8%) or manually (19.2%). Foreign body in the throat was referred.

Conclusion: The society at large should be properly educated on the need for adequate ear, nose and throat care. Indiscriminate use of cotton bud by adults to clean their ears do not make it cleaner since the ears are self-cleansing. This will go a long way in preventing high incidence of foreign bodies especially in the ears in adults.

Keywords: foreign bodies, ENT, SPSS.

Introduction

Ear, nose and throat foreign bodies in adult are uncommon. It may occur accidentally or deliberate self harm¹. However ENT foreign bodies are more common among children.

Foreign body aspiration in adult is often accidental^{3,4} and is also encountered in some mentally deranged adults. Cases of unusual foreign bodies deliberately swallowed by adults for ritual purposes have also been reported⁴.

Foreign bodies in ENT in adults are mostly seen in the ear. Adult had developed a bad habit of cleaning their ears with materials such as cotton bud, wool and match sticks which sometimes stocked as foreign bodies. Insects such as small cockroach and ants have been found in the ears of both adults and children resulting in serious discomfort due to their loud noise and movement¹. In some part of the world, foreign bodies such as leaves and other plant materials were inserted into the external auditory canal deliberately by adults as a form of native remedy. Food related foreign bodies were found commonly in both adults and children while small objects like stones, plastics and eraser were predominantly seen in paediatric age group^{8,9}.

Methods of removal of ENT foreign body in adult depends on its location. Ear foreign bodies in adult were removed with minimal complications in emergency room or ENT outpatient clinic¹⁰. Foreign bodies in the throat in both adult and children may be referred to higher

centres that have expertise and instruments such as endoscopies for its removal¹¹.

Adult patient present with foreign bodies in ENT with vivid history of when and how it occurred, as opposed to children that required high index of suspicion¹².

The aim of this study was to describe the limited type of foreign bodies in adult patient and mode of removal.

Material and method

This was a retrospective study of all patients who presented to Enugu State University Teaching Hospital Park lane from 2013-2015. Records were obtained from accident and emergency department and ENT clinics. 98 cases were identified and 27 were adults. In addition to demographic data, we obtained information on the types of foreign bodies, sex, the frequency of occurrence in ENT and method of removal. Data were represented in tabular and graphic form and analysed statistically with statistical package for social science software (SPSS).

Result

A total of ninety eight patients were evaluated. Out of which 27 patients (27.66%) were adult while 71 patients (72.4%) were children. This is represented in Table 1 and 2 below.

Table 1: Foreign bodies * Age Group Cross tabulation Count

		Age Group	
		Adult	Children
Foreign bodies	Bead	1	21
	Stone	0	9
	Cotton Bud	16	7
	Beans	0	10
	Cotton Wool	1	1
	Ear Ring	1	3
	Tissue Paper	0	1
	Incense	7	0
	Fish Bone	1	0
	Button	0	3
	Eraser	0	3
	Coin Like Object	0	1
	Water Proof	0	2
	Leader	0	1
	Palm Kernel	0	1
	Biro		
	Bottom	0	2
	Cover		
	Match Stick	0	1
	Paper	0	1
	Stick	0	1
	Metallic Object	0	1
	Orange leaf	0	1
	Bone	0	1
	Total	27	71

Table 2: Age Group

		Frequency	Percent
Valid	Adult	27	27.6
	Child	71	72.4
	Total	98	100.0

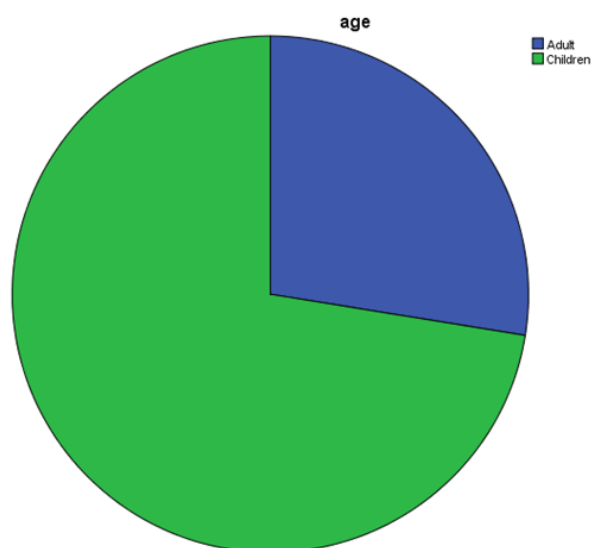


Chart 1

About the adult patient seen, 11 were male and 16 female in the ratio of 1:1:45 as shown in Table 3 below

Table 3: Age Group * Sex Cross tabulation Count

		Sex		Total
		Male	Female	
Age Group	Adult	11	16	27
Total		11	16	27

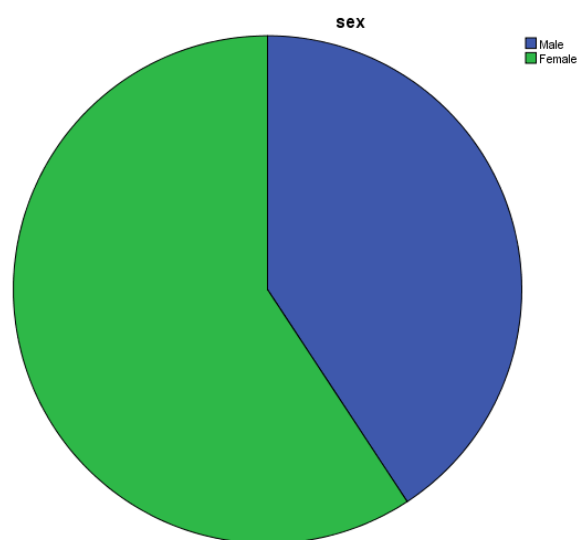


Chart 2

No foreign body was seen in the nose of adult. However, majority of the foreign body in adult were seen in the ear 26(96.3%) and throat 1 (3.7%) as illustrated Chart 3

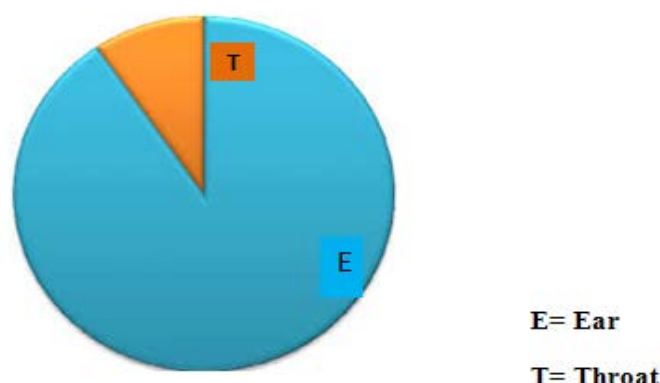
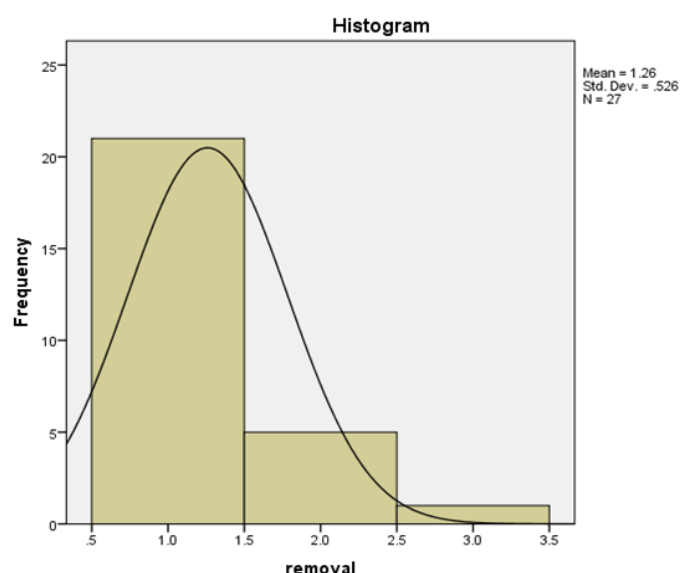


Chart 3

The most common foreign body was cotton bud 16(59.3%) found in the ear, followed by insects 7(26%). Other foreign bodies also seen in the ear were bead, ear ring, cotton wool 1 each respectively (3.8%).

Table 4: Age Group * Method of Removal Cross tabulation Count.

		Method of Removal			Total
		Syringing	Manual Removal	Referred	
Age Group	Adult	21	5	1	27
Total		21	5	1	27



Graph 1

Fish bone was only the foreign body found in the throat. Methods of foreign bodies removal as illustrated in fig v showed that syringing method was the commonest 21 (80.8%). Followed by manual removal 5 (19.2%).

Foreign body found in the throat was referred to a higher centre for urgent and expert management.

Discussion

Foreign bodies in ENT are commonly seen in children. They also occur in adults. However, there is a paucity of literature of on adult foreign bodies. Diagnosis of Foreign bodies are usually made by history of Foreign body lodgment in adults and older children ^{(4) 13}

The study reveals that foreign body in ENT in adult is not uncommon and the problem is different as the patients are mature, more cooperative and mostly aware of what was inserted in the ENT. However, the types of foreign bodies are limited and all are unilateral. The self-insertion of foreign body in the patient may be due to wrong habit, a wrong traditional thought or wrong practice ¹. The study revealed that foreign body in adult was found more in the ear with cotton bud as the culprit. It was an incidental finding because, the patient knew exactly when it occurred. They have formed the bad habit of cleaning their ears with cotton bud. The finding is the same with what was found by Almaamuri AM.

The general populace should be educated that the ears do not require any additional cleaning because there is a natural cleaning mechanism already in place.

Apart from using cotton bud to clean the ears, other objects such as keys (car keys), match sticks, broom stick, and chicken feeders are also used. This may result to otitis externa, bleeding from external auditory meatus, tympanic membrane perforation or that the object may be stocked in the ear as foreign body.

There is need for health educators to create such awareness so that the incidence of foreign bodies in adult will be reduced.

Insect (26%) was the next most common foreign body found in the adult. This was in keeping with what was found by Almaamuri AM. These are mainly flying and crawling insects such as the small cockroaches and ants. Crawling insects may enter the ear when patients are asleep. Patients become acutely aware of their presence because of the insects noise and induced pain¹². The insects should be killed first by instilling water or oil into the meatus it drown them before removal.

Bead, earring (very tiny type) and cotton wool were found in the ear. This might entered the ear accidentally during sleep or in an attempt to wear the tiny type of ear ring. Other foreign bodies found in the ear by Almaamuri AM are garlic, clove and Bluetooth device. Students wore Bluetooth's device during high school examination which may be imparted in the ear during the process of wearing or removing it.

The foreign bodies in the ear of adult were removed by syringing or manually. The commonest method was syringing. Manual method was done without sedation.

Adults cooperate very well during syringing and manual removal as oppose to children who may not allow such procedure without sedation.

Complications such as perforation of tympanic, bleeding, laceration, abrasion and otitis extternae may occur during the process of syringing and manual removal. However, we did not encounter such because the patients are cooperative adults and the procedure were done by senior registrars and occasional by consultants.

Conclusion

Types of Ear, Nose and Throat foreign bodies in adult are limited and mostly found in the ear. This may be due to abnormal behavioral attitude in most adult. Cotton bud is

abused by adult due to ignorance. There is need to create awareness on the dangers of using cotton bud in cleaning the ears and its attendant complication if it lodges in the ear as foreign bodies. More so a lot of emphasizes will be stressed by the health worker to educate the populace that the ears are self-cleansing hence the use of cotton bud using to clean the ears are of no benefit.

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