

# PATTERN OF EAR, NOSE AND THROAT FOREIGN BODIES SEEN IN UYO NIGERIA

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## SUMMARY:

Insertion, inhalation and ingestion of diverse kinds of foreign bodies have always been encountered anywhere otorhinology is practiced. This is a 5 year retrospective study (August 1998-2003) to determine the etiological pattern of foreign bodies reported in this part of Nigeria. A total of 1,797 patients were seen over the period of which 113 presented with foreign bodies. These were 46 (40.7%) males and 67 (59.3%) females with a M:F ratio of 1:1.5. Their ages ranged from 6 months to 71 years. The anatomic site distribution of foreign bodies showed that 77 (68%) occurred in the ear, 21 (18.6%) occurred in the nose while 15 (13.3%) occurred in the composite region generally called the throat. The pharynx and oesophagus were the commonest sites of foreign body lodgment in the throat followed by the larynx. The study revealed that children are still the most vulnerable group endangered by foreign bodies. Continuous caution both in prevention and appropriate management of cases must be exercised especially by the primary care providers who make up the first contacts with the patients. Early presentation and prompt referral to expert centres will avert some calamities that result from management of some foreign bodies.

**KEYWORDS:** E.N.T, Foreign Bodies, Ear, Nose, Throat, Nigeria.

## INTRODUCTION:

In a typical ear, nose and throat (ENT) clinic, each case of foreign body presents a peculiar challenge which must be handled in an appropriate fashion. Foreign bodies in the ear are almost invariably encountered in children who are most often uncooperative. For the purposes of removal, two groups of foreign bodies seen are vegetable and non-vegetable. Their methods of removal are different else more harm than good may result. In the nose, again foreign bodies are often found in children who present with symptoms of unilateral obstruction and/or offensive nasal discharge. Nasal foreign

bodies are rare in adults and may take the form of rhinoliths. In the throat, foreign bodies in the pharynx are commonest. These are most commonly fish bones which lodge in the palatin tonsil, the lingual tonsil or the base of the tongue. Foreign bodies in the air and food passages are usually more dramatic in their presentation. Those in the air passages of larynx and bronchus usually require immediate attention as they constitute life threatening emergencies. Foreign bodies in the oesophagus may rarely cause acute distress or obstruction and so may demand immediate attention as well. In all cases, foreign bodies even in the nose must be treated with respect as they only become simple after they have been brought out and not before. Caution is the rule.

## MATERIALS AND METHODS:

All patients seen in the otorhinology clinic of the Federal Medical Centre, Uyo, Nigeria over a 5 year period (Aug. 1998 July 2003) with complaints of foreign body insertion into the ear or nose, inhalation into the larynx and bronchus, and ingestion into the pharynx and oesophagus were studied. The data collected included patient's age, sex, site/side of foreign body impaction, types of foreign body, treatment given and outcome.

## RESULTS:

During the period under review, a total of 1,797 patients were seen of which one hundred and thirteen patients, 113 (6.3%) presented with foreign bodies for removal. There were 46 (40.7%) males and 67 (59.3%) females giving a sex ratio of 1:1.5 (M:F). The age ranged from 6 months to 71 years with the following ranges showing a clear preponderance.

0 10 years	→	65 (57.5%)
11 20 years	→	11 (9.7%)
21 Above	→	37 (32.7%)

The distribution of foreign body lodgment/impaction at different anatomic sites is as shown in table 1 while the various objects recovered are shown in table 2.

In the Ear, foreign bodies were removed in the right ear 19 times and left ear 58 times. Nasal foreign bodies occurred 11 times in the right side and 10 times in the left. In the throat, fish bone was the commonest foreign body followed by coins.

**TABLE 1: SITES DISTRIBUTION OF FOREIGN BODIES**

SITE	NO. OF PATIENTS	PERCENTAGE
Ear	77	68%
Nose	21	18.6%
Throat	15	13.3%
- Pharynx	5	
- Oesophagus	5	
- Larynx	4	
- Bronchus	1	
<b>TOTAL</b>	<b>113</b>	<b>100%</b>

**TABLE II: TYPES OF FOREIGN BODIES RECOVERED**

OBJECT	NO. OF PATIENTS	STAGE
Cotton bud	13	11.5%
Stone/gravel	13	11.5%
Beads	12	10.6%
Palm Kernel	9	8.0%
Fish bone	8	7.1%
Maize	7	6.2%
Foam	7	6.2%
Cockroach	6	5.3%
Coins	4	3.5%
Buttons	4	3.5%

*Other types of foreign bodies recovered were cork and paper accounting for 3 (2.7%) each, bee and eraser accounting for 2 (1.8%) each while the rest accounted for 1 (0.9%) each. These were metal spring, steel pellet, bottle top rubber, pencil head, BIC (pen) cover, wrist watch battery, office pin, peanut, denture, piece of magnet, soap and flower.*

Three of the patients with foreign bodies in the ear (2 beans and 1 palm kernel) were unskillfully interfered with resulting in complications of traumatic perforation of the tympanic membranes. The only mortality recorded in this series was in a 2 years old child who inhaled peanut into the bronchus.

**DISCUSSION:**

The history of Ear, Nose and Throat surgery cannot be complete without a chapter on foreign bodies. So varied are the objects that children and adults can insert into the orifices of the head and neck that they cannot be ignored. Some are simple, some bizarre and some most challenging with serious threat to life. Some foreign bodies in the nose can simply be removed by telling the patient (usually a child) to blow the nose, while some tinny objects can fall out of the ear at the least manipulation; but these are exceptions than the rule. Most foreign bodies must be removed with skill and care.

From this study, majority (57.7%) of the foreign bodies occurred in children below 10 years of age. This agrees with earlier studies by Okafor<sup>1</sup> in Enugu and Ladapo<sup>2</sup> and Adesunkanmi<sup>3</sup> in Ibadan. This trend is sustained in each anatomic site considered by Dillion<sup>4</sup>. Okafor<sup>5</sup> found out that 72.7% of patients with foreign body in the Larynx were aged three years or less.

Ogunleye<sup>6</sup> also found laryngeal foreign bodies coming second (14%) to juvenile laryngeal papilloma as a cause of upper airways obstruction in children in Ibadan.

Nasal foreign bodies in this study constituted 18.6% and all were seen in children. Cotton buds, stones/gravels and beads were the commonest objects removed as foreign bodies in this study while cotton bud was found predominantly in adult ears, the stones and beads were removed in children ears and nose. This agrees with the report by Dhillon<sup>4</sup>. Only 15 (13.3%) of the foreign bodies occurred in the throat and yet they were the most challenging. Eight of them (53.3%) were fish bones removed from the Pharynx and Larynx, four (26.7%) were one Naira coins all in the upper third of the oesophagus of children. One case was an office pin recovered in the adenoid in the nasopharynx. Another challenging case was that of a denture. It is known that in adults, the problem of foreign body inhalation/ingestion is usually associated with psychiatric illness or alcoholic

Intoxication<sup>4</sup>. The denture recorded in this series was swallowed by a 60 years old man who was intoxicated. He had an oesophagotomy as the object was too large and irregular to be safely removed endoscopically.

The mortality rate in this study was 0.9% resulting from the single case of peanut inhalation into the bronchus that died shortly on arrival in the Hospital. Patient was delayed at a peripheral health center where treatment for bronchial asthma was being given. Adesukanmi<sup>3</sup> and Anyanwu<sup>7</sup> reported that aspiration of foreign body into the tracheobronchial tree is a major cause of childhood accidental death in developed countries. It cannot be less in Nigeria where awareness for prompt intervention is lacking coupled with unavailable facilities and shortage of manpower.

In conclusion, this study reveals that the incidents of foreign bodies are still rampant. The objects involved are unpredictable but made up of objects commonly available in the locality. Some present as acute emergencies. Early recognition and referral is the key to prevention of morbidity and mortality. Poorly equipped health facilities must recognize their limitations. There is no heroism in meddling with some difficult foreign bodies.

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