



Profile of Otolaryngology Surgical Emergencies in Port Harcourt, Nigeria

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Abstract

Background: *Surgical emergency is a medical emergency for which immediate surgical intervention is the only way to get the patient out of the clinical problem successfully.*

In this clinical state, there is usually anxious moments for the patient and relation while the surgeon must exhibit surgical life-saving procedure.

Method: *This is a retrospective study of all emergency surgical cases that were done within the period of 5 years, January 2018 to December 2022 in the otolaryngology department of the University of Port Harcourt Teaching Hospital. All the case notes were retrieved from theatre records, clinic and wards. These notes were put in tables and analysed.*

Results: *Results showed that four hundred and eighteen (418) patient presented with various emergency medical conditions requiring different surgical procedures. Foreign body in the external ear 253 (60.1%) topped the list, followed by foreign body in the nasal cavity 80 (21%). Least in the list were vocal cord papilloma, laryngeal polyp, septal abscess with one case each (0.2%).*

Conclusion: *Otolaryngology surgical emergencies are life threatening conditions. Early presentation and treatment is required to avoid mortality.*

Keywords: *Surgical emergency, Otolaryngology, Tracheostomy.*

Introduction

Medical emergency where only surgical intervention is done to get the patient out of his/her problem is considered as surgical emergency. This is usually encountered in all specialties in medical practice. This study carried out is focused on otolaryngology, head and neck surgical emergencies¹.

Few studies are available in this area of clinical research, hence there is need to provide more time in evaluating these procedures in our centre. There could be peculiarities in various centres considering the environmental factors as well as facilities available in each of these centres.

Our centre is located in Port Harcourt within the Niger Delta region of Nigeria². In this clinical research, both children and adult are considered

having in mind that both are involved in various surgical emergencies encountered in otolaryngology³.

The aim of this study is to evaluate the clinical profile of surgical emergency and to identify these medical conditions involved in surgical emergencies and their outcome.

With this work, clinicians will be able to have better references involving emergency surgeries in otolaryngology in our centre which is entirely a tertiary centre.

Method

This is a five (5) year retrospective study in the University of Port Harcourt Teaching Hospital which is a tertiary centre in the Niger Delta region of Rivers State Nigeria. Study from January 2016 to December 2022.

We retrieved all surgical record from theatre, ward and clinic from the otolaryngology department. Both male and female were included. Also, children and adult were also recorded in the study. We did not include cold cases in the study. All biodata were recorded. The type of medical emergency, the emergency surgical treatment

given as well as the anaesthesia given were put on tables and analysed.

During the period of study four hundred and eighteen (418) patients presented with emergency medicine conditions and table indicated various surgical procedure utilised.

Results

Table I shows the number of medical conditions and percentages of each. Foreign body in the ear presented higher in the list 251 (60%), followed by nasal cavity 86 (21%). Laryngeal tumour came third on the list with 21 (5%).

Table II shows medical condition and the emergency surgery that were conducted on presentation. Two external ear foreign bodies were removed under anaesthesia due to severe impaction. The rest of 251 (60%) were removed as clinic procedure.

Laryngeal foreign body presented 14 (3.4%) in number. Two had direct laryngoscopy and removal, while the rest had tracheostomy and direct laryngoscopy. Two gunshot neck injury, had tracheostomy and neck explanation.

Table I: Number of Medical condition requiring emergency surgery and percentages

Medical Conditions	No. of Cases	Percentages (%)
Foreign Bodies in ear (under anaesthesia)	2	0.4
Foreign bodies in external meatus	251	60
Foreign body in nasal cavity	86	21
Laryngeal tumour	21	5
Laryngeal foreign body	14	3.4
Oesophageal foreign body	10	2.4
Bronchial foreign body	8	1.9
Gunshot neck injury	2	0.4
Hypopharyngeal Neoplasm	1	0.2
Vocal Cord Papilloma	1	0.2
Laryngeal Polyp	1	0.2
Epistaxis	17	4.0
Septal Haematoma	2	0.4
Septal Abscess	1	0.2
Bilateral Choanal Atresia	1	0.2
Total = 418		

Table II: Medical conditions and surgical procedure done

Medical Conditions	No. of Cases	Surgical Procedures
Foreign body in ear	2	Under Anaesthesia
Foreign body in external meatus	251	Removed in the clinic
Foreign body in nasal cavity	86	Removed in the clinic
Epistaxis	17	Anterior nasal pack Posterior nasal pack
Laryngeal tumour	21	Tracheostomy + Direct Laryngoscopy
Laryngeal foreign body	14 2 12	Direct Laryngoscopy Tracheostomy + Direct Laryngoscopy
Oesophageal foreign body	10	Oesophagoscopy
Bronchial foreign body	8	Bronchoscopy
Gunshot neck injury	2	Tracheostomy and neck exploration
Hypopharyngeal Neoplasm	1	Tracheostomy and Direct Hypopharyngoscopy
Vocal cord papilloma	1	Direct Laryngoscopy and Excision
Laryngeal polyp	1	Direct laryngoscopy and Excision
Septal Haematoma	2	Incision/Drainage Nasal Packing
Septal Abscess	1	Incision/Drainage Nasal Packing
Bilateral Choanal Atresia	1	Choanoplasty
Total = 418		

Discussion

Otolaryngological surgical emergency varies from simple foreign body in the ear and nose to life threatening laryngeal obstructive condition which if not attended to urgently will lead to mortality. Even when all these medical conditions are regarded as emergency surgical condition. Some require more urgent attention for the patient to recover from his/her clinical state^{1,2}.

Many of our patient were referred from other health facilities, due to the fact that our centre is a tertiary centre where you have specialist in various specialties.

Table I shows various medical conditions requiring emergency surgery, including percentages.

Foreign bodies in external meatal canal topped the list, with 253 (60.4%)^{3,4}. This is followed by foreign body in nasal cavity with 86 cases (21%). In the 253 meatal ear foreign bodies, 2 (0.4%) had general anaesthesia due to severe impaction of the object in the meatal wall. The rest 251 (60%) had procedure and removal in clinic setting⁵.

86 (21%) nasal foreign body were removed in the clinic setting. None had general anaesthesia.

Laryngeal obstructive lesion presented 3rd 14(3.4%) in the list and is one of the medical

condition requiring emergency procedure as tracheostomy.

In our study, we had 21 (5%) laryngeal tumours and 14 (3.4%) laryngeal foreign bodies.

In the cases of laryngeal tumours, all had tracheostomy and direct laryngoscopy while the laryngeal foreign bodies 14 (3.4%), two had direct laryngoscopy while 12 (%) had tracheostomy and direct laryngoscopy^{5,6}.

Hypopharyngeal neoplasm, vocal cord papilloma, laryngeal polyp and bilateral choanal atresia presented 1 (0.2%) each⁷.

Bilateral choanal atresia had emergency resuscitative measures, before choanoplasty. Emergency resuscitative measure will include passing appropriate oropharyngeal tube, ventilation through the oropharyngeal tube as well as feeding. Choanoplasty can now be planned on a later date. Patient did not have emergency tracheostomy as some literature will suggest.

The study recorded 2 (0.4%) gunshot neck injuries which had tracheostomy and neck exploration^{10,11}.

Bronchial foreign body and oesophageal foreign bodies presented 8 (1.9%) and 10 (2.4%) respectively. Brochoscopy and Oesophagoscopy were done in each respectively. Foreign bodies removed from the oesophagus were mostly

dentures^{12,13}. The study recorded 2 (0.4%) of septal haematoma and 1(0.2%) of septal abscess.

It is important to make appropriate referral to the specialist for effective management. Especially when it concerns surgical emergencies¹⁴. Aerodigestive pathway obstructions require early, speedy attention as delay may lead to mortality. Abscess and haematoma should be drained immediately. Delay may initiate cartilage necrosis, especially in the nasal septum^{15,16}.

Conclusion

Surgical emergencies in otolaryngology are life threatening medical conditions, especially when it affect the airway. Early presentation to appropriated centre and early treatment is urgently required as delay may complicate the morbidity and cause mortality. Health care givers must be aware of consequences that follow and give perfect direction/referral that is equipped for treatment.

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