## Research Article,

# The Pattern of Ear, Nose & Throat (Ent) Surgeries in A Secondary Health Centre in Enugu South Local Government Area of Enugu State Sourth-East, Nigeria

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#### **Abstract:**

There is a wide spectrum of ear, nose and throat surgical conditions affecting both children and adults in Nigeria. This study aimed at determining the prevalence, socio-demographic features, types of ear, nose and throat surgical procedures in a secondary health centre in Enugu.

### **Patients and Methods:**

This was a retrospective hospital based study of ENT clinic operation booking register and theatre operation register. Data obtained were collated, documented and statistically analysed using SPSS version 20.0 software.

#### **Result:**

A total of 75 patients were operated at the centre during the period under review. The female to male was 1:1:2. The age range was from 1 year to 85 years. The indication for surgeries involving the throat were 67 (89.3%). The nose 7(9.2%). No surgery was performed in the ear. Adenotosillectomy 52(69.3) was the commonest surgery performed is in throat while polypectomy 4(5.3%) occurred more in the nose.

### **Conclusion:**

Resources for Ear, Nose and throat surgeries in Enugu South Local Government are grossly inadequate. There is need for partnership with the Local Government administrator to upgrade the facilities.

**Keywords:** Surgeries, Ear, Nose, Throat, Pattern, Enugu South

### **Introduction:**

There is a wide variation in patterns of ENT surgeries performed worldwide depending mostly on the capacity of personnel and facilities available in that particular ENT centre. surgery is characterized by a wide range of treatments with a significant proportion of outpatient work. Surgery ranges from extensive head and neck resection and reconstruction, extensive nasal and paranasal sinsus surgery that might requires endoscopy, and more common procedure such as tonsillectomy. ENT surgeons work closely with many other surgical disciplines. For instance in the field of head and neck cancer, they work with colleague in oral and maxillofacial surgery and oncology. In both anterior and lateral

skull base surgery, ENT surgeons work with neurosurgeons. They also work with colleagues in ophthalmology on operations to the nose and orbit<sup>1</sup>.

Pathology in the ear, nose and throat among children are common otorhinolaryngology diseases encountered in ENT, and head and neck surgery <sup>2,3</sup>. However this problem is common in children, it can affect any age group <sup>2,4</sup>. There is wide spectrum of ENT surgical condition affecting children and adult in developing countries. Pediatrics otolaryngology surgeries represent a major part of all otolaryngology surgery <sup>5,6</sup>. It involves congenital anomalies, surgical infections, injuries and tumors. Rhinology

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encompasses clinical and surgical treatment of the nasal cavity and paranasal sinuses. Rhinologist receive intensive training on the medical and minimally invasive surgical treatment of chronic nasal and sinus disorder such as rhinosinusitis, lacrimal gland disorder, nasal polyps, sino nasal neoplasm, anterior skull base tumor and optic nerve decompression. They are also expert in endoscopic sinus surgery<sup>8</sup>. Otologist deals with clinical and surgical treatment of the ear and mastoid. Otologic surgical produce include the following Aural polypectomy, mastiodectomy Auriculoplasty, Excision (auricular cyst) and cochlear implant.

Little information is available about ENT surgeries in a secondary health care in Enugu. Majority of the populace think that ENT Surgeries are performed only in a tertiary or teaching Hospital.

The study aimed at determining the pattern of Ear, Nose and Throat surgery in a secondary health Centre in Enugu South Local Government Area, South East Nigeria.

#### **Materials and Methods:**

The study was a retrospective hospital based study

of ear, nose and throat patient who had ear nose and throat surgeries. The study was carried out over a period of two years (Jan 2017 to Dec. 2019). The study was carried out in Reggie Ear, Nose and Throat Clinical located at No 100 Agbani Road Uwani- Enugu a secondary health centre in Enugu South Local Government Area South East Nigeria.

Data from the study was obtained from the medical record department, clinic operation booking register and theatre operation register. Socio-demographic features such as age, gender and domicile were obtained. Data on patients conditions such as clinical features, diagnosis, indication for surgery and type of surgery were obtained and documented. All data obtained were collated, documented and analysed statistically using SPSS version 20.0 software. The data were then expressed in percentage, frequency tables and charts.

#### **Results:**

The total number of ENT surgeries done during the period of study was 75, out of which 67 cases were done in the throat and 8 cases in the nose. No surgery was done in the ear.

Table	1	showed	the	numl	her	Λf	surgeries	done.
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		Frequency	Percent	Valid Percent	<b>Cumulative Percent</b>
Valid	1-5yrs	44	58.7	58.7	58.7
	6-10yrs	13	17.3	17.3	76.0
	11-15yrs	8	10.7	10.7	86.7
	16-20yrs	4	5.3	5.3	92.0
	21-25yrs	2	2.7	2.7	94.7
	31-35yrs	2	2.7	2.7	97.3
	36-40yrs	1	1.3	1.3	98.7
	81-85yrs	1	1.3	1.3	100.0
	Total	75	100.0	100.0	

Table 1A showed the number of surgeries done and their indications for the surgery in Ear, Nose and throat.

The indication for surgeries in the throat

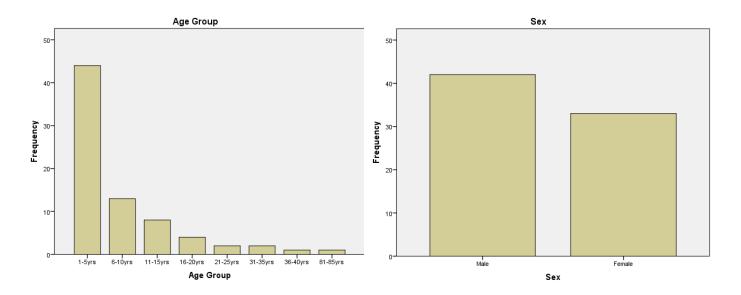
indication	frequency	Percent %	
obst. Adenotonsilar disease	52	69.3%	
chronic tonsillitis	8	10.7%	
Adenoid enlargement	5	6.7%	
sub labial mass	1	1.3%	
foreign body in the throat	1	1.3%	
total	69	89.3%	

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### The indication for surgeries in the Nose

Indication	Frequency	Percent %
septal deviation	1	1.3%
Foreign body in the LT	1	1.3%
nasal polyp	1	1.3%
nasal polyp (B)	2	2.7%
foreign body in the right nasal	1	1.3%
cavity		
total	9	9.2%

In this study age group 1 to 5 years had the highest number of surgery (adeno tonsillectomy) 52 (69.3%) while the age group 81-8 years had the least number of surgery (excision) 1 (1.3%).

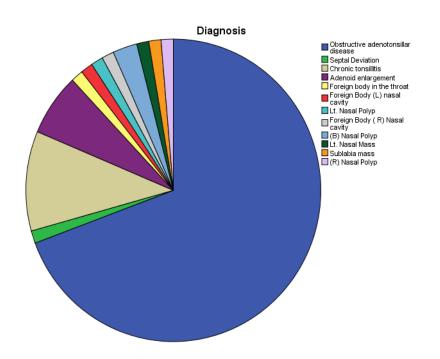


There were 42 males (56%) and 36 females with male to female ration of 1.6:1. See table 3 and 3a respectively.

Sex						
		Frequency	Percent	Valid Percent	Cumulative	
					Percent	
	Male	42	56.0	56.0	56.0	
Valid	Female	33	44.0	44.0	100.0	
	Total	75	100.0	100.0		

There were various indications for surgery as shown in table 4. However obstructive adenotonsillar disease52 (69.3%) was most common hence the surgery in the throat. Bilateral nasal polyp .2 (2.7%) was the commonest indication of nasal surgeries. See table 4.

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#### **Discussion:**

Surgery is one of the main modalities of treatment in various ENT (Ear, nose and throat) diseases<sup>9</sup>. Majority of ENT surgeries are performed in a tertiary facilities health where equipment/instrument and human resources such as an ENT consultants, ENT resident doctors, nurse are numerous. There is a paucity of data on ENT surgeries in a secondary health care. In Nigeria, different types of ENT surgical procedure were carried out in secondary health centre of Enugu South Local Government Area of Enugu State. Prevalence of ENT procedure in this study is low due to patients' financial constraints, nonavailable surgical equipment and other barriers to otorhinlaryngological procedure 7,10, ENT surgeries were performed in all age groups with highest prevalence in children age group 1 -5 year as showed in table 2 and 2a. This finding were similar to report from Da Lilly-Tariah OB et al in Port Harcourt – Nigeria<sup>11</sup>.

The scope of ear, nose and throat surgery in this study showed that throat was the most common procedure done in secondary health care.

Adenotonsillectomy, adenoidectomy and tonsillectomy were the major throat procedure performed. These procedures were mostly done in children who are more prone to upper

aerodigestive infection leading to tonsillitis and obstructive adenotonsillar disease". This is similar to the finding of Onotai LO et al Rhinologic surgeries were found to be most common among adult. Few surgeries were performed and the most common was bilateral nasal polypectomy. Others were unilateral nasal polypectomy, septoplasty and foreign body in the nasal cavity. Recurrent nasal polyps secondary at chronic maxillary sinusitis was the commonest indication for rhinologic surgery in this study. (1.3%). This agreed with the study done in teaching Hospital Sokoto North West by Iseh and Mankusidi 13 which found chronic form of rhinosinusitis to be more prevalent (83.6%). Minimal invasive surgeries that require endoscopes are the current trend in surgical practice. This current surgical practice is still not available in majority of the tertiary health care in our country. No ear surgery was done during the period of study due to obvious reasons; such as non-availability of equipment. Ear surgeries such a mastoidectomy (cortical, radical and modified stapodectomy and cochlear implant will require operating microscope and highly skilled Otologist. These are not within reach of the secondary health care. Some tertiary health care do not have such facilities. However Otologic surgeries are at its

lowest in our country.

ENT surgeries in secondary health centre in Enugu South Local Government are limited mainly by material resources. Although there are few secondary health centers that performed ENT surgeries, they have consultant ENT surgeons.

#### **Conclusion:**

Ear, nose and throat (ENT) is characterized by a diverse range of treatment and surgical procedure. These require a vast array of medicine, devices and instruments that range in cost from the relatively inexpensive, such as ear grommets to high cost technologies such as cochlear implants.

#### **Reference:**

- [1] Andrew Marshall. Ear, Nose and Throat Surgery. Get It Right First Time (GIRFT Programme National Specialist Report 2019)
- [2] Yojana S. Mehta K. Girish M. Epidemiological profile of otorhinolaryngological emergencies at medical college, in rural area of Gujarat. Indian J. Otolaryngol Head Neck Surg. 2021; 64(3): 218-24.
- [3] Chiun KC, Tang IP, Tan TY, Jong DE, Review of ear, nose and throat Foreign Bodies in Sarawak General Hospital. A five year experience. Med J. Malaysia 2012;67(1):17-20.
- [4] Ray R, Dutta M, Mukherjee M, Gayen GC,. Foreign body in ear, nose and throat: experience in a tertiary hospital. Indian J Otolaryngol Head Neck Surg. 2014;(1):13-6.
- [5] Ibekwe MU, Mbalaso DC, Pattern of Paediatric Ear Nose and Throat Diseases in Port Harcourt, South South Nigeria. The Nigeria Health Journal 2015, 5(2):48-54.
- [6] Fasunla AJ, Samadi M, Nwaorgu OG. An Audit of Ear, Nose and Throat Diseases in a

- tertiary health institution in South-Western Nigeria. Pan Afri. Med. J. 2013; 14:1.
- [7] Onotai LO, Mbalaso OC, Rhinologic Surgeries in the University of Port Harcourt Teaching Hospital: A 5 year retrospective analysis. Gazette of Medicine 2014;3(1): 241-5.
- [8] Walen SG, Rudmik LR, Lipkewitch S, Dixon E, Mechor B. Training, Practice and referral patterns in rhinologic surgery: survey of otolaryngologists. J. Otolaryngol Head Neck Surg 2010 June 39(3): 2970303.
- [9] Ambalika Shakya, Urinila Gurang, Rabindra B. Pradhanaga, Biyaga Kharel and Kripa Dongol. Same day cancellation of elective ENT surgeries in a tertiary referral hospital. Otorhinolaryngology Head and Neck Surgery 2020 5: 1-3.doi 10.15761/OHNS.1000234.
- [10] Lasisi AO, Otolaryngological Practice in Developing countries. A profile of Met and Unmet Needs. East and Central African Journal of Surgery, 2008; 13(2):10-4.
- [11] Da Lilly-Tariah OB, Peterside OA,. The Scope of Ear, Nose and Throat suegeries in the theatre of University of Port Harcourt Teaching Hospital J. Med. Trop. 2008;10(1):15-22.
- [12] Onotai LO, Da Lilly-Tariah O. Adenoid and Tonsil Surgeries in children. How relevant is Pre-operative blood. Grouping and Cross-matching? Afri. J. Paediatr. Surg. 2013;10(3): 231-4.
- [13] Iseh KR, Mankusidi M. Rhinosinusitis: a retrospective analysis of clinical pattern and outcome in North Western Nigeria. Ann Afr. Med. 2010;9(1):20-6.
- [14] Chijioke C. Anekpo, Anthony J.Edeh, Nkiru NM Okoloagu. Resources for Ear Nose and Throat (ENT) Health Care Services at Primary and Secondary Hospital level in Enugu South Local Government Area of Enugu State, Eastern Nigeria JMSCR 2020:8(2):01-05.