

RETROSPECTIVE ANALYSIS OF PATTERN OF SURGERIES IN TERTIARY GOVERNMENT ENT HOSPITAL

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ABSTRACT: AIM AND OBJECTIVE: The main aim of this study was to estimate the prevalence of common and rare ear, nose, throat and head and neck disorders which were undertaken for surgery in our hospital during 2013-2014. **MATERIALS AND METHODS:** During the period of 2013-2014, around 20,000 patients attended to the outpatient department, of which 1400 patients were found to be suffering from ENT diseases which required surgery. Out of the total patients, 657 patients (46.9%) had ear problems, 295 patients (21.1%) were suffering with nose diseases, while 255 patients (18.2%) had throat symptoms and 193 patients (13.8%) with head and neck disorders. Chronic suppurative otitis media was the most common diagnosis in patients with ear symptoms. Among the nasal problems, sinusitis and allergic nasal polyposis was the most common diagnosis, while tonsillitis is the dominant diagnosis made in patients with throat disorders seen in this study. In the malignant disorders of the throat, carcinoma of larynx and hypopharynx was occupying the highest place. In thyroid disorders, benign tumours were observed to be most common.

KEYWORDS: Tympanoplasty, functional endoscopic sinus surgery (FESS), tonsillectomy.

INTRODUCTION: The aim of this study is to assess and analyse different surgical procedures in ENT and HEAD & NECK surgery department for the disease pattern to a tertiary hospital. The study was conducted in Government ENT hospital, ANDHRA MEDICAL COLLEGE. The surgeries done in 100 consecutive operation theatre days were taken into consideration. The study will help us to know the common surgeries in our hospital.

METHODOLOGY: In our study, surgeries performed in 100 operation theatre days during the period of March 2013 to August 2014 were taken up. The study was conducted in tertiary government ENT hospital, Visakhapatnam which has catchment area of patients coming from surrounding area covering a total population of around 65 lakhs. Out of the 20,000 patients attended to outpatient department, 1400 cases were screened for surgery after thorough clinical examination, laboratory tests and pre anesthetic checkup.

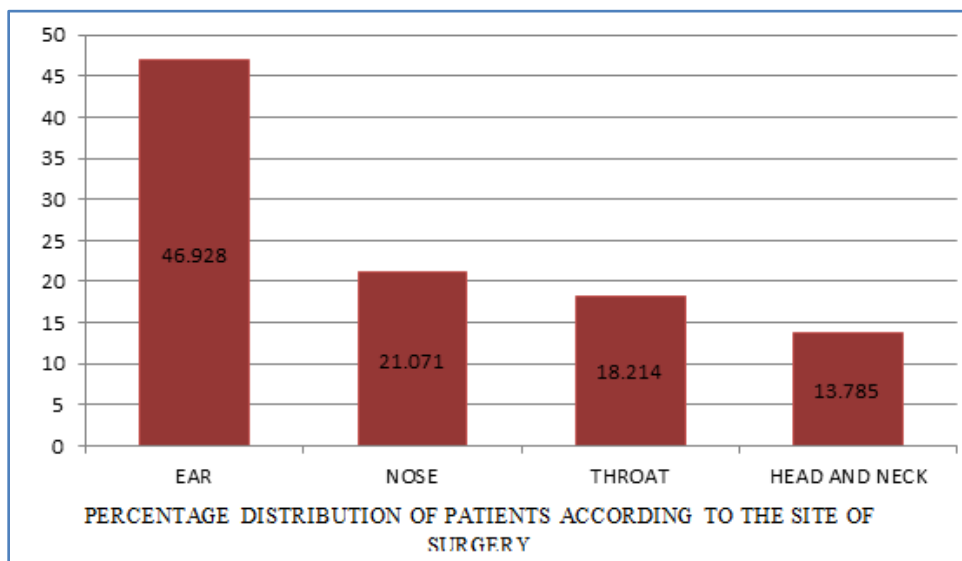
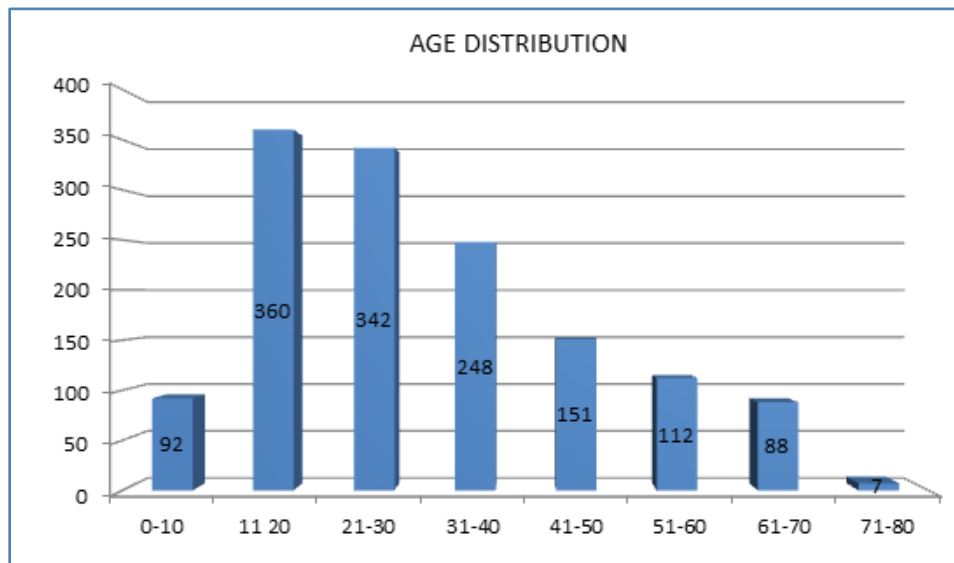
These patients were distributed into age ranges, to know which age group is commonly effected. They were also categorized according to the surgeries planned for, into categories of ear, nose, throat and head and neck surgical groups. In each group, surgeries were placed in descending order of their number to identify the commonest surgery performed.

RESULTS: A total number of 1400 surgeries, both major & minor were analyzed.

The age distribution is shown in the chart 1. Majority of patients were in 2nd and 3rd decades.⁽¹⁾ Here, majority of the surgeries were done for ear problems with observed percentage of 46.9%, nasal surgeries in 21.1%, throat surgeries in 18.2% and head and neck surgeries in 13.8%.

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Among the ear surgeries, the commonest surgery was tympanoplasty in 67.5% cases for CSOM with central perforation, tympanoplasty with mastoidectomy was done in 17.7% for CSOM with attico-antral disease followed by aural polypectomy in 3.5%.⁽²⁾ In the nasal surgeries, the commonest surgery was FESS done in 46.1% for sinusitis and allergic nasal polyposis, septoplasty was done in 26.1% for deviated nasal septum followed by endoscopic dacrycystorhinostomy done in 3%. In the list of throat surgeries, tonsillectomy was observed high in 53%, later direct laryngoscopy and biopsy in 25.5%, and adenotonsillectomy in 7.84%. Among head and neck surgeries, hemithyroidectomy in 25.4%, tracheostomy in 21.2%, followed by hard palate growth biopsies done in 18.1%.



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TYPE OF SURGERY	NO. OF CASES
TYMPANOPLASTY	444
TYMPANOPLASTY WITH MASTOIDECTOMY	116
EXTERNAL AUDITORY CANAL POLYPECTOMY	23
STAPEDOTOMY	18
TEAR EAR LOBULE REPAIR	15
KERATOSIS OBTURANS REMOVAL	11
WINDOW OPERATION	10
I & D OF POST AURICULAR ABSCESS	10
PREAURICULAR SINUS EXCISION	5
POSTAURICULAR DERMOID EXCISION	5

Table 1: DISTRIBUTION OF EAR SURGERIES

TYPE OF SURGERY	No. OF CASES
FESS	136
SEPTOPLASTY	77
DIAGNOSTIC NASAL ENDOSCOPY	40
TURBINOPLASTY	10
NASAL BONE CORRECTION	10
YOUNG'S OPERATION	4
SEPTO-RHINOPLASTY	4
RHINOSCLEROMA-EXCISION	2
RHINOSPORIDIOSIS-EXCISION	2

Table 2: DISTRIBUTION OF NOSE SURGERIES

TYPE OF SURGERY	No. OF SURGERIES
TRACHEOSTOMY	41
HEMI-THYROIDECTOMY	49
HARD PALATE GROWTH BIOPSIES	38
TONGUE GROWTH BIOPSY	37
SEBACEOUS CYST EXCISION	7
SISTRUNK OPERATION	7
SUBMANDIBULAR GLAND EXCISION	6
SUPERFICIAL PAROTIDECTOMY	4
UVULOPALATOPHARYNGOPLASTY	3

Table 3: DISTRIBUTION OF HEAD AND NECK SURGERIES

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TYPE OF SURGERY	NUMBER OF SURGERIES
TONSILLECTOMY	135
DIRECT LARYNGOSCOPY AND BIOPSY	65
ADENOTONSILLECTOMY	20
MICROLARYNGEAL SURGERIES	16
FOREIGN BODY REMOVAL OF AERO-DIGESTIVE TRACT	12
ADENOTONSILLECTOMY WITH GROMMET INSERTION	7

Table 4: DISTRIBUTION OF THROAT SURGERIES

DISCUSSION: To this Government ENT speciality hospital, VISAKHAPATNAM, most of the patients come from Visakhapatnam and neighboring 4 districts, few from rest of the ANDHRA PRADESH & ORISSA, and are mostly of low socio-economic status. In our study of 1400 Cases of ENT surgeries, majority were tympanoplasties -31.7% (444), tympanoplasty with mastoidectomy- 8.3% (116), with total 40% (560) for CSOM which occupies first position in our study.⁽³⁾ This denotes the significant increase in the awareness among the population about hearing, which is important for education and their occupation.⁽⁴⁾

The areas covered by this hospital lie in the East-coast region of India, where the humidity levels are high & the industrial pollution with dust & chemicals is rampant. Due to this, nasal allergies and chronic sinusitis are most commonly encountered, for which Functional endoscopic sinus surgeries (9.71%) were done, occupying the second position. Tonsillectomies took highest position among the throat disorders & overall 3rd position because they are dealt mainly at the Primary and Secondary hospitals.

CONCLUSION: In this study TYMPANOPLASTY with & without MASTOIDECTOMY for CSOM took the highest position followed by the Functional Endoscopic Sinus surgery for chronic sinusitis & allergic nasal polyposis and TONSILLECTOMY.^(5,6) This shows the need for the upgradation of surgical skills regularly by the surgical team of secondary hospitals by attending training programmes at the tertiary hospitals. As the above common surgeries require good operating microscopes, endoscopes, motor drills, micro- debridors, light source and camera with monitors, the study recommends the higher authorities & government to supply the adequate equipment & infrastructure for the smooth and successful conduct of the secondary hospitals.

REFERENCES:

1. Sigel B, Nepali R (2012): pattern of ear disease among pediatric ENT patients: an experience from tertiary care centre, pokhara, Nepal J. Nepal. Pediatr. Soc; 32(2):142-45.
2. Journal of medicine and medical sciences Vol. 4 (3) PP.96-100, March 2013. Otologic diseases in a tertiary hospital in the delta region of Nigeria.
3. Rao RS, Subramanyam MA, Nair MS, Rajashekar B (2002). Hearing impairment and ear diseases among children of school entry age in rural south India. Int J pediatric otorhinolaryngology 64 (2):105-10.

ORIGINAL ARTICLE

4. Juliana benthien Cavichiolo¹, Bertina Carvalho², Ellse Zimmermann³, International archives of otorhinolaryngology 2010. Volume 14(4): 422-425.
5. Rupa V, Jacob A, Joseph A (1999). Chronic suppurative otitis media: prevalence and practices among rural South Indian children. Int J pediatric otorhinolaryngology 48:217-21.
6. Mccafferty GJ, Lawis AN, Coman WB, Mills c (1985). A nine ear study of ear studies in Australian aboriginal children. J. otol. Laryngol:99:117-125.

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