



A Retrospective Analysis of Pattern of Surgeries in Tertiary Government ENT Hospital

Dr.G.Harikrishna	M S ENT Associate professor , Department of ENT , Rangaraya medical college, Government general hospital, Kakinada, AP
Dr V.Ch.V.Siva Kumar	M S ENT, Assistant professor, Department of ENT , Rangaraya medical college, Government general hospital, Kakinada, AP
Dr.Shahina Ather	Junior resident , Department of ENT , Rangaraya medical college, Government general hospital, Kakinada, AP
KEYWORDS	Tympanoplasty, functional endoscopic sinus surgery (FESS), tonsillectomy

INTRODUCTION:
The aim of this study is to assess and analyze different surgical procedures in ENT and HEAD & NECK surgery department for the disease pattern to a tertiary hospital. The study was conducted in ENT Dept, Government General Hospital, RANGA-RAYA MEDICAL COLLEGE. The surgeries done over 12 months were taken into consideration. The study will help us to know the common surgeries in our hospital.

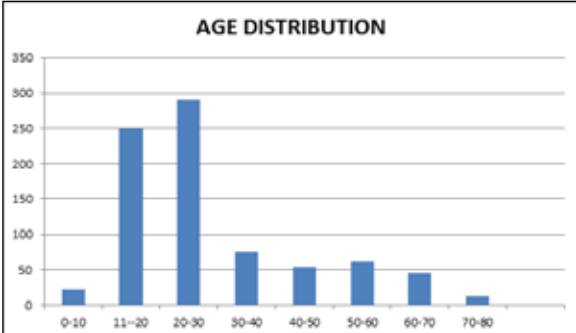
AIM AND OBJECTIVE:
The main aim of this study was to estimate the prevalence of common and rare ear, nose, throat and head and neck disorders which were undertaken for surgery in our hospital during 2015-2016.

MATERIALS AND METHODS:
During the period of 2015-2016, around 3600 patients attended to the outpatient department, of which 819 patients were found to be suffering from ENT diseases which required surgery. Out of these 819 patients, 204 patients (24.9%) had ear problems, 250 patients (30.5%) were suffering with nose diseases, while 249 patients (30.5%) had oral cavity and oropharynx diseases. 61 (7.4%) patients had laryngeal problems and 55 patients (6.7%) had head and neck disorders. Chronic suppurative otitis media was the most common diagnosis in patients with ear symptoms. Among the nasal problems, nasal obstruction due to deviated nasal septum was most common diagnosis followed by sinusitis and allergic nasal polyposis. Chronic tonsillitis was the dominant diagnosis made in patients with oropharyngeal 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 tumors were observed to be most common.

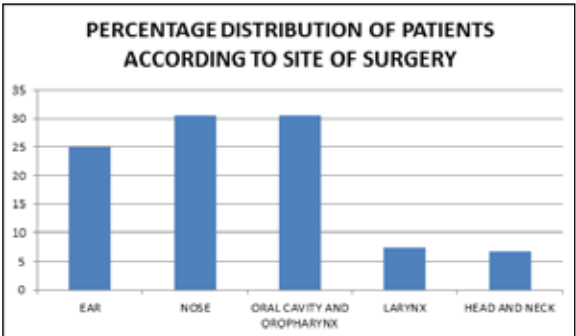
METHODOLOGY:
In our study, surgeries performed over 150 operation theatre days during the period of June 2015 to Dec 2015 were taken up. The study was conducted in a tertiary government hospital, ENT Dept, Kakinada which has catchment area of patients coming from East Godavari District and surrounding regions covering a total population of around 5million. Out of the 3600 patients attended to outpatient department, 819 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 affected. They were also categorized according to the surgeries planned for, into categories of ear, nose, oral cavity and Oropharynx, larynx and head and neck surgery groups. In each group, number of surgeries in each type was noted to identify the commonest surgery performed.

RESULTS:
A total number of 819 surgeries, both major & minor were analyzed.

AGE DISTRIBUTION:
The age distribution is shown in the chart 1.majority of patients were in 2nd and 3rd decades.



Percentage distribution of patients according to site of surgery:
Here, majority of the surgeries were done for nose problems with observed percentage of 30.5 %, ear surgeries in 24.9%, oral cavity and oropharyngeal surgeries in 30.5%, laryngeal surgeries in 7.4% and head and neck surgeries in 6.7%.



TYPE OF EAR SURGERY	NO. OF CASES
TYMPANOPLASTY	97
TYMPANOPLASTY WITH CORTICAL MASTOIDECTOMY	31
TYMPANOPLASTY WITH MODIFIED RADICAL MASTOIDECTOMY	21
TEAR EAR LOBULE REPAIR	15

WINDOW OPERATION	8
AURAL POLYPECTOMY	10
STAPEDOTOMY	9
PRE AURICULAR SINUS EXCISION	7
POST AURICULAR DERMOID EXCISION	3
MYRINGOTOMY AND GROMMET INSERTION	3
TOTAL	204

Among the ear surgeries, the commonest surgery was tympanoplasty in 47.5% cases for CSOM with central perforation, tympanoplasty with mastoidectomy was done in 25.4% for CSOM with attico-antral disease.

TYPE OF NASAL SURGERY	NO. OF CASES
SEPTOPLASTY	123
FESS: MMA	31
FESS: AC POLYPS	20
FESS: ETHMOIDAL POLYPS	19
ENDOSCOPIC EXCISION OF BENIGN GROWTHS	16
ENDOSCOPIC EXCISION OF MALIGNANCIES	4
DCR	10
YOUNG'S OPERATION	1
INFERIOR TURBINECTOMY	5
CSF RHINORRHOEA LEAK REPAIR	3
DNE AND BIOPSY	7
SEPTAL HEMATOMA I&D	4
SEPTAL ABSCESS I&D	4
FOREIGN BODY REMOVAL UNDER GA	3
TOTAL	250

In the nasal surgeries, the commonest surgery was septoplasty done in 49.2% for deviated nasal septum, FESS was done in 15.6% for antrochoanal and ethmoidal polyposis followed by FESS for sinusitis in 12.4%.

TYPE OF LARYNGEAL SURGERY	NO. OF CASES
MICROLARYNGEAL SURGERY	8
LASER POSTERIOR CORDECTOMY	4
DIRECT LARYNGOSCOPY & BIOPSY	14
VIDEOLARYNGOSCOPY & BIOPSY	35
TOTAL	61

Videolaryngoscopy assisted biopsies were most common in laryngeal diseases at 57.3% followed by direct laryngoscopic biopsies at 22.9%.

ORAL CAVITY AND OROPHARYNGEAL SURGERIES	NO. OF CASES
ADENOTONSILLECTOMY UNDER GA	205
OESOPHAGOSCOPY FOR WEB DILATATION	3
OESOPHAGOSCOPY FOR FOREIGN BODY REMOVAL	10
TONGUE TIE	5
LASER EXCISION OF ORAL GROWTHS	4
PALATE BIOPSIES	18
CALD WEL LUC PROCEDURES	4
TOTAL	249

Most common oral cavity and oropharyngeal procedures were tonsillectomy at 82.3% followed by palate biopsies 7.2% and oesophagoscopy at 5.2%. All patients undergoing tonsillectomy undergo diagnostic nasal endoscopy prior to surgery and undergo adenoidectomy in case of adenoid hypertrophy.

HEAD & NECK SURGERIES	NO. OF CASES
TRACHEOSTOMY	32
HEMITHYROIDECTOMY	3
SISTRUNK OPERATION	5
MAXILLECTOMY	1
SQUAMOUS CELL CA. LIP LASER EXCISION	1
REMOVAL OF BENIGN LESIONS LIP	13
TOTAL	55

Tracheostomy (58.18%) was the most common head and neck surgery performed.

DISCUSSION:

Most of the people coming to Govt. General Hospital, Kakinada are people from East and West Godavari Districts in Andhra Pradesh. These regions are on the east coast in Andhra. The effect of climate and humidity maybe taken into consideration when evaluating the reasons for more common diseases. Large number of industries and pollution may play a role in disease patterns. Most of the people come from low socioeconomic status with an improving literacy rate [East Godavari Literacy rate: 71%]. A lot of the people coming to Govt. General Hospital, Kakinada are farmers, fishermen and industrial workers. Exposure to dust and chemicals may play a role. Using firewood for cooking was a common thing in most elderly patients. A significant number of children coming to this centre study in boarding schools. Teachers at schools play a role in guiding the parents of children about medical attention when a child appears sick. This is important in primary prevention of ear diseases at an early age. Children undergoing tonsillectomy at primary centres under local anesthesia present later at our centre with adenoid hypertrophy and nasal obstruction or ear problems. They are treated by adenoidectomy with or without grommet insertion. Climate and pollution may play a role in causing sinusitis and polyposis. Exposure to dust and habit of eating fish in smoked preparations or use of firewood in cooking may be a reason for nasal masses. Patients in the older age group are used to reverse smoking which maybe the cause of increased palate biopsies. The availability of a cobalt unit for radiotherapy at Govt. General Hospital, Kakinada may play a role in the increasing number of patients coming for cancer treatment, who, in case of stridor immediately undergo tracheostomy followed by biopsy of causative lesions.

CONCLUSION:

in this study, tonsillectomy [with or without adenoidectomy] was the most common surgery performed [205 patients, 25.03%]. Septoplasty for deviated nasal septum was found to be the 2nd most common surgery [123 patients, 15.01%] followed by tympanoplasty for chronic suppurative otitis media [97 patients, 11.8%]. Availability of better operating microscopes, rigid, semi rigid and flexible endoscopes, surgical camera equipment, light sources, debridors and other powered instruments play a role in better treatment to the patients. Polysomnography equipment, if made available, may help better understand the spectrum of snoring and sleep apnea and its treatment. This study recommends the higher authorities and Government to supply the adequate equipment & infrastructure for the smooth and successful conduct of tertiary hospitals.