

Surgical Audit of patients reported to E.N.T Unit 1 Mayo Hospital/King Edward Medical University, Lahore for period of one year 2013 -2014

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ABSTRACT

A one-year prospective surgical audit of Department of Otorhinolaryngology & Head & Neck surgery Unit.1 Mayo Hospital was undertaken. The purpose of the audit was to evaluate the yearly performance of the unit & to establish the pattern and frequency of various ENT diseases encountered. A total of 5860 (five thousand eight hundred and sixty) patients were seen in both Outpatient as well as emergency departments. 920 (nine hundred & twenty) were operated under General Anesthesia for various reasons and 4940 (four thousand nine hundred & forty) cases were minor surgical procedures. Most common General Anesthesia procedure was Tonsillectomy and common minor cases include foreign body ear & nose and wax in the ear. Overall 45% cases seen were males, 28% were females and 27% were children.

Keywords: Foreign body, surgical audit, tonsillectomy

INTRODUCTION

Surgical audit is a systematic, critical analysis of the quality of surgical care provided, with the aims of improving quality of care, application of surgical skills, continuing education for surgeons, and guiding appropriate use of health resources². Mayo hospital Lahore is an ancient teaching hospital in the subcontinent. ENT Unit.1 of the department is a 30 bedded teaching ward with a 3 bedded isolation unit. The Outpatient Department of ENT Unit.1 is the busiest outpatient department of the hospital with a daily influx of around 350-400 patients. ENT is a specialty with a very indistinct boundary line and encompasses other specialties like Maxillofacial surgery, General surgery, Neurosurgery, Plastic surgery, Chest surgery, Ophthalmology, Neurology & Oncology and collaboration with medical department as well. All these specialties are inter-linked in larger public interest and best possible patient care. A large number of patients are also referred to ENT department from various other specialties as well. The yearly surgical audit not only helps us to review the overall performance of the unit throughout the year but also gives us a clue about the prevalence of various diseases related to head & neck region in our local population. The incidence of various ENT related cases in different age groups & their distribution according to gender, can also be overviewed through this surgical audit. This will help us to reduce the occurrence of various ENT related diseases by public education, awareness, prevention

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& early diagnosis and hence better quality of life for general masses.

MATERIALS & METHODS

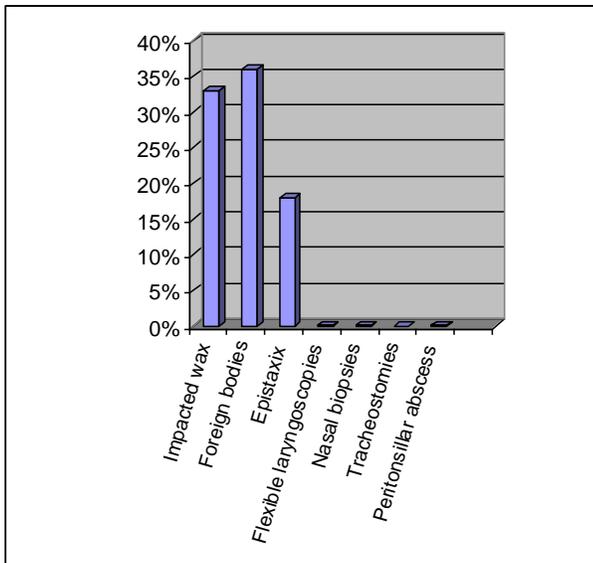
Data was collected about Major & minor surgical procedures done in ENT Unit.1 operation theatre during one year i.e., from April 2013 upto March 2014. The source of data was the entry registers maintained by the unit. Data was integrated in descriptive form and results were concluded from them. The mode of admission in ENT unit.1 is Outpatient Department & Emergency. The department has 3 OPD days & 3 emergency days in a week however there are 2 Sunday emergency days in a month. Total patients treated in one year by the department were grossly divided into major & minor cases. Major cases include General Anesthesia cases which were admitted into the ward via OPD. Minor cases include both OPD cases (treated & discharged from OPD) and Local anesthesia cases from ENT emergency as well as OPD (called to ENT Operation theatre for treatment).

RESULTS

One year surgical audit of ENT Unit.1 has shown that a total of 5860 cases were seen collectively in both Outpatient & Emergency departments, out of which data of major & minor operated cases was collected. There were 920 major cases which were operated under General Anesthesia of which Tonsillectomy (258 cases) & Septoplasty (256 cases) were the common procedures. There were also 4940 minor cases seen collectively in both Outpatient as well as

Emergency departments. Among the minor cases seen in ENT Emergency, the most common being Impacted Wax (1647 cases) & Foreign bodies of Ear & Nose (1761 cases). A significant number of patients (909 cases) presented to ENT emergency with Epistaxis of which most common cause being Road Traffic Accidents (237cases). Pediatric cases make 27% of the total major & minor cases in ENT which is higher than that in England (24%)⁷ mainly due to poor ENT hygiene here in children. An overall male predominance of ENT cases was seen in GA as well as Local Anesthesia cases, reason being a more frequent exposure of males to external environment & pollutants rendering them more vulnerable for ENT related diseases.

Local anaesthesia



General anaesthesia cases

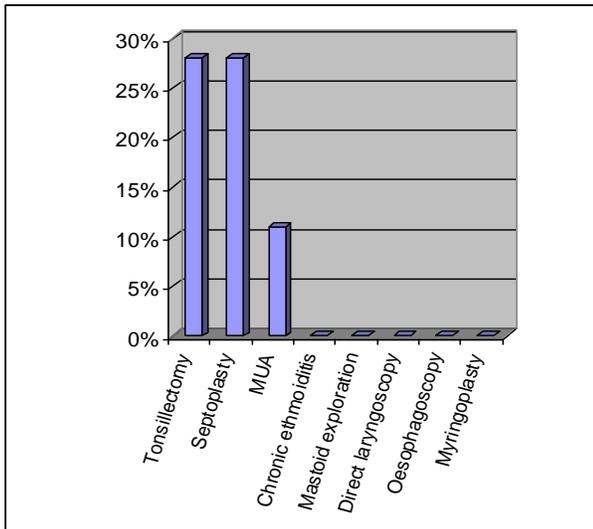


Table 3: Gender distribution of cases

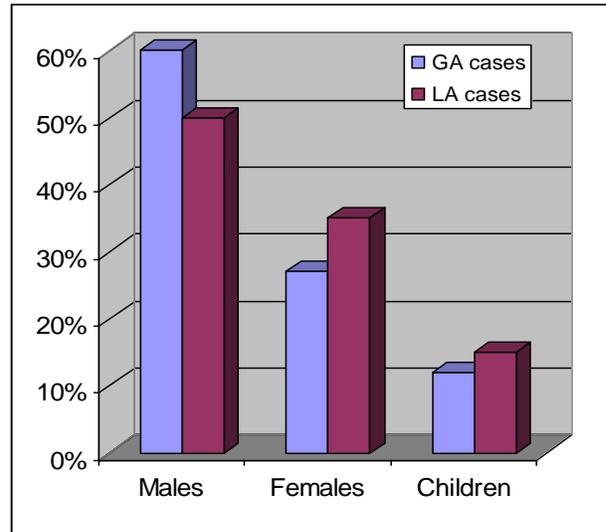


Table 1: Local anesthesia cases

Impacted wax	1649
F.B Nose	897
F.B Ear	871
Epistaxis	672
RTA	237
Flexible laryngoscopy	366
Nasal biopsy	86
Tracheostomy	48
Peritonsillar abscess	32
Mastoid abscess	31

Table 1: General anaesthesia cases

Tonsillectomy	258
Septoplasty	256
MUA	101
Chronic Ethmoiditis	86
Mastoid Exploration	33
Direct Laryngoscopy	55
Rigid Esophagoscopy	50
Impacted F.B Ear	32
Adenotonsillectomy	35
Myringoplasty	24

DISCUSSION

A total of 5860 (five thousand eight hundred and sixty) patients were seen & treated by the unit in one year, out of which 4940 (four thousand nine hundred and forty) were minor cases and 920 (nine hundred and twenty) were major cases. Minor cases comprised of 1647 (one thousand six hundred and forty seven) cases of Ear wax removal, 897 (eight hundred and ninety seven) cases of Foreign body nose, 871 (eight hundred and seventy one) cases of Foreign body ear, 672 (six hundred and seventy two) cases of Epistaxis, 366 (three hundred and sixty six) cases of diagnostic fibreoptic laryngoscopy, 237 (two

hundred thirty seven) cases of road traffic accidents, 86 (eighty six) cases of nasal biopsies, 48 (forty eight) cases of tracheostomy, 32 (thirty two) cases of peritonsillar abscess, 31 (thirty one) cases of Mastoid abscess (Table.1). Major cases included 258 (two hundred fifty eight) cases of Tonsillectomy, 256 (two hundred fifty six) cases of Septoplasty, 101 (one hundred and one) cases of Nasal Fracture manipulation, 86 (eighty six) cases of chronic ethmoiditis, 33 (thirty three) cases of Mastoid exploration, 55 (fifty five) cases of Rigid oesophagoscopy, 50 (fifty) cases of Direct laryngoscopy & biopsy, 32 (thirty two) cases of Impacted foreign body ear, 25 (twenty five) cases of Adeno-tonsillectomy, 24 (twenty four) cases of Myringoplasty, 1 (one) case of excision of Nasopharyngeal Angiofibroma (Table.2). As far as gender discrimination is concerned, 588 (five hundred and eighty eight) major cases were males whereas 332 (three hundred thirty two) cases were females so overall male preponderance of ENT diseases was observed (Table 3). In a survey conducted in England, there were a total of 742 (seven hundred and forty two) cases dealt in ENT emergency in a district general hospital in which male to female ratio was 1.2:1 and 24% of the total patients were children (below 16 years of age)⁷. Majority of emergency cases dealt in our unit comprised of foreign bodies in Ear, nose & throat and some cases were also referred from other public sector & government hospitals. A large number of patients referred from A & E Department were having poly trauma with injuries to the head n neck, chest & limb injuries. Patients of deep neck space infections such as peritonsillar abscess, parapharyngeal abscess were also seen in ENT emergency and after incision & drainage they were admitted to the ward for further management.

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