

Audit in ENT and Head & Neck Surgery

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ABSTRACT

ENT department has the second largest out patients department in Mayo Hospital, Lahore¹. Mayo hospital in itself is one of the largest hospitals in Pakistan, in terms of area it occupies, the beds, faculty and the amount of patient load. To learn the disease pattern for prevention of the disease, better management of patients, training and education of medical students. This is a retrospective study of patients who presented in Out-Patient department of Mayo hospital in those days when ENT unit-1 was on duty from 1-Jan-2009 to 31-Dec-2009.

Key words: Audit, head & neck surgery

INTRODUCTION

ENT which is now also known as Head & Neck Surgery is the most complicated area of the gross anatomy; it is difficult to understand, comprehend and learn³. Hence, any disease of ENT or Head & Neck surgery is thought of extremely dangerous and is referred to the concerned specialist by the General physician or the medical officer receiving the patient in Out-Patients department. The speciality of ENT, despite being so specific as the name suggests has very indistinct boundary line and is frequently transgressed by numerous other specialities such as Neurology, Neurosurgery, Oncologic surgery, Ophthalmology, General surgery, Paediatric surgery, Plastic and Reconstructive surgery, Respiratory medicine, Chest surgery, Gastroenterology and the new Maxillofacial surgery⁴. Hence, with all these fields of Medicine and Surgery mingling and all these Departments running and working with their full recognized faculty the Out-Patients departments of

all these Specialties will have patients which can be in ENT e.g. a patient of vertigo can be seen in ENT, Neurology, Medicine, Neurosurgery or even in Ophthalmology, likewise a patient of foreign body air way can be seen in Chest surgery, ENT or Paediatric surgery. Therefore, in a large institute like Mayo Hospital /King Edward Medical University classical bookish pattern of disease can never be achieved but there are specific diseases to every speciality that will never change just like tonsillitis or deflected nasal septum or chronic suppurative otitis media will always be present in ENT ward.

MATERIALS AND METHODS

894 patients were admitted through Out-Patients department in the said one year period (2009). These patients were then further divided into 10 main regional pathologies, and included all patients regardless of age, sex, management approaches and treatment outcomes.

RESULTS

Table 1: Diseases of ENT and their occurrence throughout the year 2008

	Jan	Feb	Mar	April	May	Jun	July	Aug	Sep	Oct	Nov	Dec
Otology	11	8	9	11	6	4	11	5	10	15	6	8
Oral Cavity	18	14	15	17	26	19	29	24	12	24	13	8
Laryngo- Bronchial	1	3	2	3	7	3	6	1	0	6	5	6
Pharyngo- Esophageal	2	5	4	4	2	6	5	0	0	4	4	4
Nose & Sinuses	31	41	35	37	38	26	40	30	22	44	30	30
Skull base	3	2	3	4	7	7	4	5	2	7	2	0
Salivary Glands	2	1	1	3	3	0	0	1	0	1	2	1
Neck	1	0	1	0	1	1	0	0	0	1	0	1
Neurological disorders	2	2	1	1	2	0	1	2	0	0	2	1
Misc	1	0	0	0	0	0	1	0	0	0	0	1
Total	72	76	71	80	92	66	97	68	46	102	64	60

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Table 2: Cumulative amount of ENT diseases and their occurrence.

Region of ENT	Amount in years
Otology	104
Oral cavity	219
Laryngo-bronchial tree	43
Pharyngo-oesophagus	40
Nose & sinuses	404
Skull base	46
Salivary glands	15
Neck	6
Neurological disorder	14
Miscellaneous	3
Total	894

Table 3: Percentage of disease occurrence.

Region of ENT	%age
Otology	11.6
Oral cavity	24.5
Laryngo-bronchial tree	4.80
Pharyngo-oesophagus	4.47
Nose & sinuses	45.2
Skull base	5.15
Salivary glands	1.67
Neck	0.67
Neurological disorder	1.57
Miscellaneous	0.33
Total	100.0

DISCUSSION

ENT unit-1 is a 70 bedded teaching ward¹ with 5 bedded isolation sections in the ward. Statistics compiled by ENT unit-1 relating to the disease pattern in ENT of patients admitted through Outdoor-patients department in Mayo hospital reveal that total of 894 patients were admitted during the period of one year starting from 1st January 2009 to 31st December 2009. It approximates to a mean average of 74.5 patients per month with the maximum admissions in the month of October of 102 patients and minimum admissions in September of 46 patients, otherwise the admissions have remained in a fairly reasonable range of 60 admissions to 80 new admissions per month. A reason that could explain why there was such varied range in the two months of September and October is the fact that the religious Holy Islamic month of Ramadan and Eid-ul-Fitr came in the month of September when the office working hours are reduced, 3 days mid week holidays, patients are reluctant for admission and operation as Muslims are busy in praying and fasting hence, soon after the Eid has passed there is a rebound influx of patients and the back log of patients of the month of September arriving in October. As

there are two admissions days per week of ENT unit-1 this averages up to approximately 9.5 new admission per admission day. As ENT is a very vast field and cannot be summarised in a short variable range, attempt has been made to subdivide the ENT diseases into 10 main categories as mentioned above. As the data reflects 894 patients were admitted through Out-patients department with maximum of 404 patients having i.e. 45.2 % having the pathology in Nose and Para nasal sinuses with majority being Deflected nasal septum, Nasal polyps and Fracture of nasal bone⁵. Pathologies of the Oral cavity consisted of the second highest admissions, 219 in total i.e. 24.5% major chunk of it being consisting of the patients with Chronic Tonsillitis requiring Tonsillectomy. Third most common ENT pathology, as the data shows is that of Otology. 104 patients of Ear diseases were admitted throughout the year which consisted of overall 11.6% of the patients. Majority of the Otology diseases admitted through ENT Opd required either a Myringo-plasty or Mastoid bone exploration. There was a fairly equal rate of admission and incidence of diseases of Skull base, Laryngo-Bronchial tree and Pharyngo-Esophageal. The pattern showed that 46 patients were admitted with the disease of Skull base i.e. 5.15% consisting mainly of Chronic Adenoiditis. 43 patients with the pathology of Laryngo-Bronchial tree i.e. 4.8% consisting mainly of pathologies of Larynx, Hoarseness of voice and Strider. 40 patients of Pharyngo-Esophageal were admitted i.e. 4.5% through Out-patients department, Hypo-pharyngeal mass and growth forming bulk of the patients in this category. One startling finding was that of diseases of salivary glands which were only 15 in total i.e. 1.67% of total admissions but this could very well be explained by the fact that Parotid gland surgeries are not performed by ENT dept in Mayo hospital. Same is the case with diseases of the neck which was very low i.e. total of 6 patients or only 0.67%, Thyroid and Parathyroid surgeries which form the bulk of admissions and surgeries of the neck diseases are not admitted in ENT department but instead in General surgery in Mayo hospital. One surprising finding which came out was that of neurological disorders of ENT, 14 patients were admitted with these i.e. 1.57% with majority being facial nerve palsy or Bell's palsy (an idiopathic and self limiting disease) being so severe that it required admission.

CONCLUSION

In a teaching hospital the mode of admission is through the visiting faculty in ENT unit-1 which

consists of the Professor in charge of the department, Associate professor and the Assistant professor, hence the admission in ENT department also depends on the inclination of the surgeon concerned⁶ and his interests i.e. an ENT surgeon with more interest in Otolaryngology will tend to admit more Otolaryngology patients but keeping all human induced errors in mind the overall picture is quite clear. There is a wide range and variety of ENT pathologies being admitted through ENT outdoor department however, the most common pathology requiring admission was Deflected nasal septum⁷ and chronic tonsillitis⁸ requiring surgery. Another disease process is the Nasal polyp⁹ which constituted the major chunk of admissions. Otolaryngological diseases consisting mainly of Chronic Suppurative Otitis Media¹⁰ without or with complication (extra and intra cranial) requiring surgery, is also a very common pathology of ENT.

The entire disease rate can be brought down to a very low incidence by adequate primary care and treating the disease early^{11,12}. For example adequate hygiene, proper diet and awareness can reduce the incidence of chronic tonsillitis¹³. Same as the case of Nasal polyps, the commonest cause of which remains as allergy and chronic infection, treating the allergy and eliminating the infection by adequate medicines and precautions can reduce the incidence⁹. Chronic suppurative otitis media is also usually caused by or is a complication of upper respiratory tract infection, again adequate medicinal therapy and precautions will ultimately heal the tympanic membrane and thus protecting the mastoid cavity from further disease process^{11,13}. After all, health system in Pakistan is run absolutely on government funding, thus diseases which are so frequent in population yet can be reduced by education, awareness, proper counselling, precaution, care, adequate treatment and crackdown on quacks and quackeries are an undue burden on national exchequer and economy of a third world country like Pakistan. However, this opens another Pandora's Box and no further attempt to discuss it further will be made here.

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