

An Audit Of Otorhinolaryngological Practice In A Nigerian Teaching Hospital

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Abstract

Background

We sought to audit otorhinolaryngologic practice in our center with a view to providing recommendations for improved patient care.

Method

A prospective audit of patients presenting to our otorhinolaryngology clinic from June 2007 to May 2008 was done.

Results

Four hundred and eighty six new patients were seen aged between 3 months and 82 years.

There were 262 (53.9%) males and 224 (46.1%) females. Otologic presentations accounted for 238 (49%) patients, nasal presentations- 177 (36%) patients, throat presentations- 65 (14%) patients and head and neck presentations- 6 (1%) patients.

There were 154 admissions and 106 surgical procedures were performed with limited personnel, diagnostic and therapeutic facilities to administer patient care.

Conclusion

Adequate provision of diagnostic and therapeutic facilities with specialized personnel training will improve patient care and outcome.

INTRODUCTION

Otorhinolaryngological practice in Nigeria is hampered by the dearth of Otorhinolaryngologists and the inadequacy of proper diagnostic and therapeutic facilities to deliver effective service. In 1998, there were about 32 practicing Otorhinolaryngologists in Nigeria, making 1 Otorhinolaryngologist per 3 million population¹. A decade afterwards, this number has only been doubled with about 40 residents in training² and an increasing population to cater for.

In our center like most other hospitals in Nigeria, the available personnel and equipment required for effective Otorhinolaryngological care does not match the needs. Other factors which have been cited as militating against the provision of such a care include inaccessibility to health care facilities, certain traditions and beliefs and their harmful practices and the poor treatment of acute cases patients receive from the first contact health personnel³.

Accurate and legible medical records are essential to good

quality patient care⁴ but the prior lack of adequate data in our center had made retrospective studies unreliable, hence, this prospective study aimed at documenting the pattern of out-patient Otorhinolaryngological presentations in our center with a view to improving patient care and outcome within the present levels of personnel and equipment available to deliver these services.

PATIENTS AND METHODS

This is a hospital based prospective study spanning a period of one year (June 2007 to May 2008) and carried out in the Otorhinolaryngology unit of the Department of Surgery, Jos University Teaching Hospital.

All patients presenting in our Otorhinolaryngology clinic within the study period were analyzed for age, sex, source of referral, clinical diagnosis, therapeutic modality offered and the outcome of treatment.

The findings are presented in simple descriptive forms.

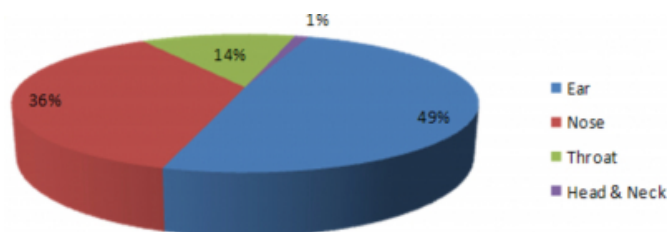
RESULTS

A total of 486 new patients were seen in the study period, aged between 3 months and 82 years. There were 262 (53.9%) males and 224 (46.1%) females giving a male to female ratio of 1:1.

Otologic presentations accounted for 238 (49%) patients, nasal presentations- 177 (36%) patients, throat presentations- 65 (14%) patients and head and neck presentations- 6 (1%) patients (Figure 1).

Figure 1

Figure 1: Patient presentation by anatomical site.

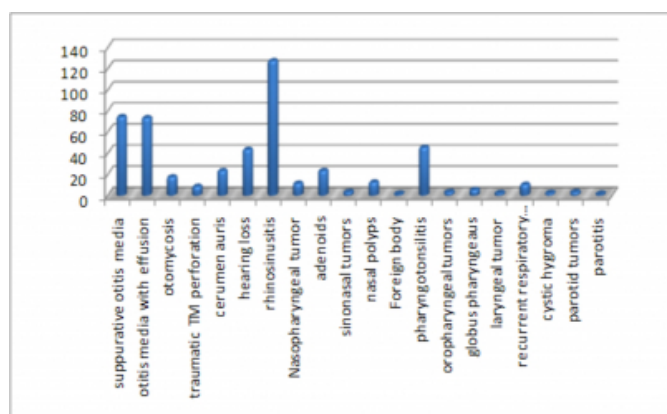


Sixty two percent of the patients seen were referred to our Otorhinolaryngology clinic by doctors in our hospital while 38% of referrals were from other hospitals in and outside Plateau state. Seventy percent of the referrals from within our hospital were by the General Medical Practitioners (GMP), 26% were from Pediatricians and the rest from doctors of various other specialties.

Figure 2 shows the frequency distribution of the working clinical diagnoses of patients seen in the study period.

Figure 2

Figure 2: Frequency distribution of working clinical diagnoses.



There were a total of 154 admissions from the out-patient Otorhinolaryngological unit.

One hundred and six surgical procedures were performed in

the study period. Adenotonsillectomy was the commonest operation accounting for 45 (42.5%). Others as shown in Table 1 below include, intranasal antrostomy- 16 (15.1%), examination under anesthesia- 11 (10.4%), nasal polypectomy- 10 (9.4%), direct laryngoscopy- 10 (9.4%), superficial Parotidectomy- 3 (2.8%), caldwel-luc- 2 (1.9%), total laryngectomy- 2 (1.9%), maxillectomy- 2 (1.9%), excision of cystic hygroma- 2 (1.9%), Mastoidectomy- 2 (1.9%), external ethmoidectomy- 1 (0.9%).

Ninety three (19.1%) patients required computerized tomographic (CT) scan for diagnosis. Only 16 (17.2%) of these could afford it and had to travel about 200 kilometers to get to a hospital with this facility.

Nasal smear cytology was the only available diagnostic tool for nasal allergy. All suspected cases had nasal smear cytology.

One hundred and ninety eight patients collectively required pure tone and free field audiometry. These patients had this done at a hospital which was 15 kilometers away.

Seventeen patients required radiotherapy and were all sent to a facility about 200 kilometers away for treatment.

Only two otorhinolaryngology trained nurses are available to cater for patients both in the clinic, theater and ward, working with 3 resident doctors and overseen by 3 consultants.

Figure 3

Table 1: Operative procedures

Procedure	Frequency	Percentage
Adenotonsillectomy	45	42.5
Intranasal antrostomy	16	15.1
Examination under anesthesia	11	10.4
Nasal polypectomy	10	9.4
Direct laryngoscopy	10	9.4
Superficial parotidectomy	3	2.8
Caldwel-luc	2	1.9
Total laryngectomy	2	1.9
Maxillectomy	2	1.9
Cystic hygroma excision	2	1.9
Mastoidectomy	2	1.9
External ethmoidectomy	1	0.9
Total	106	100

DISCUSSION

The Jos University Teaching Hospital, situated in the North-central zone of Nigeria provides Otorhinolaryngological care to patients from 6 neighboring states. Given the increasing number of Otorhinolaryngological referrals from hospitals in these states, it is pertinent to adequately equip our hospital to meet the increasing demand of caring for these patients.

Our audit shows that otologic presentations accounted for half of the total number of cases seen. However, majority of our patients were referred to another facility to get simple audiologic tests done because equipments for these diagnostic procedures are presently not available in our center. The number of otologic presentations in our study does not conform to that of the otologic surgeries performed and this is due to the unavailability of microsurgical equipments to perform otologic operations. The mastoidectomies performed were done with the aid of loupes.

Seventy percent of the Otorhinolaryngological referrals from within our hospital were noted to be from the general medical practitioners with referrals even for cases presenting with cerumen auris. Further training by way of continuing medical education for general medical practitioners and primary health care providers is needed to equip this category of doctors to treat acute Otorhinolaryngological conditions at first presentation with minimal or no complications.

The commonest working diagnosis made was rhinosinusitis. This could be due to the prevailing cold and dusty weather in our environment. Further research is required to make a conclusion on this. Intranasal antrostomy accounted for the second most common surgery performed with complications such as early closure of antrostomy and failure to relieve patients' symptoms been recorded in some. The availability of new techniques like functional endoscopic sinus surgery in the treatment of this and other intranasal conditions could have given a better clinical outcome.

The absence of fiberoptic endoscopes makes all our patients with suspected laryngeal and pharyngeal conditions to be subjected to examination under anesthesia with its attendant complications.

We see a number of patients with various types of head and neck tumors requiring CT scan to aid diagnosis and

radiotherapy for treatment following diagnosis. Due to a combined factor of limitation of funds and the distance patients have to travel to access these facilities in another hospital, only a small number of our patients get to have a CT scan and many die or are lost to follow up because they never get to have radiotherapy or combination therapy as the case may be for their tumors.

This audit has been able to establish that there is an inadequacy of diagnostic and therapeutic facilities in our center to deliver effective Otorhinolaryngological care and we therefore make the following recommendations;

1. Adequate and proper record keeping of patient management in our clinics, theater and wards.
2. Specialized Otorhinolaryngological training of more personnel i.e. resident doctors, nurses, audiologists and speech therapists.
3. Provision of effective diagnostic tools and instruments required to treat patients including newer methods for diagnosis and therapy.

CONCLUSION

We hope that a systematic replication of this project, possibly on a regional and general practice basis would allow development of improved patient services and delivery of care.

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