

OTORHINOLARYNGOLOGY AND GERIATRICS IN IBADAN, NIGERIA.

BY

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BACKGROUND:

Changing demographics trends in our country will have a profound influence on the future practice of otolaryngology. The geriatrics population has already become the fastest-growing segment of our society and it will continue to be so for decades to come and very soon a larger percentage of patients treated by Otolaryngologist will be in the over 65 age groups. The aim of this study is to present our observations on geriatrics ORL as seen in Ibadan, Nigeria.

Methodology:

A retrospective study analysis of 170 geriatrics patients that presented in the Ear, Nose and Throat Department of the University College Hospital, Ibadan, Nigeria between 2000 and 2004 was done. The diagnosis in each subject was based on history, clinical findings, and investigations done on each subject at the time of presentation.

Results:

170 geriatrics patients were seen and treated over the 5-year studied period with 94 males (55.3%), 76 females (44.7%) (M:F 1.2:1) and with an average age of 70.9 years (age range 65-97 years). The geriatrics patients constituted 3.64% of the total new cases (4,675) seen during the studied period. Majority of the patients lived in the towns and cities 109 (64.1%) while 61 (35.9%) lived in the villages. 158 (92.9%) were married with 69 (40.6%) engaged in trading as an occupation while 54 (31.8%) and 23 (13.5%) were pensioners and housewife respectively. Only 16 (9.4%) still engaged in farming activities. The main presentations in these geriatrics patients were otological presentations 114 (67.1%) followed by rhinological 31(18.2%) and laryngeal presentations 22 (12.9%) respectively. Facio-plastic presentations were of 3 (1.8%) cases. Presbycusis 35 (30.7%) and cerumen auris 30 (26.3%) were the main otological problems encountered.

Rhino-sinusitis 20 (58.8%) constituted the main rhinological problems seen. Laryngeal carcinoma 10 (41.7%) and pharyngolaryngitis 6 (25%) constituted the main laryngeal problems found in this study. Majority of the patients were treated as outpatients 160 (94.1%), only 10 (5.9%) required admission for their treatments with an average hospital stays of 3-weeks.

Conclusion:

In conclusion, presbycusis, cerumen auris, rhino-sinusitis, and laryngeal carcinoma were the main otorhinolaryngological presentations seen among the geriatrics studied. With the explosive growth of the elderly population, this group will become a larger percentage of patients in the future and Otolaryngologist would need to be prepared to take care of these categories of patients adequately. Current and newly developed information relating to geriatrics in otolaryngology must be incorporated into present training of Otolaryngologist. Continuing education programs in geriatrics otolaryngology should be provided for all physicians in family practice to ensure early referral of such cases to ORL specialists.

Key words: *geriatrics, otolaryngology, presbycusis, sinusitis, laryngeal carcinoma.*

INTRODUCTION

Changing demographics trends in our country will have a profound influence on the future practice of otolaryngology. The geriatrics population has already become the fastest-growing segment of our society and it will continue to be so for decades to come and very soon a larger percentage of patients treated by Otolaryngologist will be in the over sixty-five years of age.

Familiarity with the terminology, concept and statistics of demography is key to understanding the influence that the aging of the population will have on the practice of otolaryngology¹.

These elderly have diminished social interaction already, which is now worsened by onset of head and neck problems. Some of the common otolaryngology related complaints seen in them are hearing loss, balance disorders, nasal complaints, dysphagia, vocal disturbance, head and neck cancers and cosmetic problems.

It is the aim of this study to present our observations on geriatrics Otorhinolaryngology as seen in Ibadan, Nigeria.

MATERIALS AND METHODS

A retrospective study analysis of 170 geriatrics patients that presented in the Ear, Nose and Throat Department of the University College Hospital, Ibadan, Nigeria between 2000 and 2004 was done. The diagnosis in each subject was based on history, clinical findings, and investigations done on each subject at the time of presentation.

RESULTS

There were 170 geriatrics patients seen and treated over the five-year studied period comprising 94 males (55.3%) and 76 females (44.7%) (M:F 1.2:1) with an average age of 70.9 years (age range of 65 - 97 years).

The geriatrics patients constituted 3.64% of the total new ORL cases (4,675) seen during the studied period. Majority of the patients lived in the towns and cities 109 (64.1%) while 61 (35.9%) lived in the villages. 158 (92.9%) were married with 69 (40.6%) engaged in trading as an occupation while 54 (31.8%) and 23 (13.5%) were pensioners and housewife respectively. Only 16 (9.4%) still engaged in farming activities.

The main presentations in these geriatrics patients were otological presentations 114 (67.1%) followed by rhinological 31 (18.2%) and laryngeal presentations 22 (12.9%) respectively. Facio-plastic presentations were of 3 (1.8%) cases.

Presbycusis 35 (30.7%) and cerumen auris 30 (26.3%) were the main otological problems encountered among the geriatrics during the study. The other otological presentations are as shown in Table 1.

Table 1- Geriatrics Otological Presentations

Otological Presentations	Incidence
Presbycusis	35 (30.7%)
Wax	30 (26.3%)
Otomycosis	9 (7.9%)
Otitis media	8 (7.0%)
Tinnitus (Idiopathic)	8 (7.0%)
Noise induced hearing loss	7 (6.1%)
Otitis externa	6 (5.3%)
Others	11 (9.6%)

Rhinosinusitis 20 (64.5%) constituted the main rhinological problems seen while the other presentations are as shown in Table 2.

Table 2- Geriatrics Rhinological Presentations

Rhinological Presentations	Incidence
Rhino-sinusitis	20 (64.5%)
Epistaxis (Idiopathic)	4 (12.9%)
Sino-nasal tumours	3 (9.7%)
Nasal polyps	3 (9.7%)
Nasopharyngeal carcinoma	1 (3.2%)

Laryngeal carcinoma 10 (45.5%) and pharyngo-laryngitis 6 (27.3%) constituted the main pharyngo-laryngeal problems found in this study while the other presentations are as shown in Table 3.

Table 3-Geriatrics Pharyngo-Laryngological Presentations

Pharyngo-laryngological Presentation	Incidence
Laryngeal carcinomas	10 (45.5%)
Pharyngo-laryngitis	6 (27.3%)
Hypopharyngeal tumours	2 (9.1%)
Goitres	2 (9.1%)
Corrosives pharyngo-oesophagitis	1 (4.5%)
Globus pharyngeus	1 (4.5%)

Majority of the patients were treated as outpatients 160 (94.1%) while 10 (5.9%) had required admission for their treatments with an average hospital stays of 3 weeks.

DISCUSSION

Care of the geriatrics patients involves fundamental premises, which must be taken into account in treatment by Otolaryngologist. Often multiples diseases co-exist in these patients, which often present a diagnostic dilemma in treatment.

In this study the main presentations were otological presentations 114 (67.1%) followed by rhinological 31 (18.2%) and laryngeal presentations 22 (12.9%) respectively. Presbycusis 35 (30.7%) and cerumen auris 30 (26.3%) constituted the main otological problems encountered among the geriatrics during the study.

Hearing loss and degeneration of balance control in the aged is of gradual onset and form part of the progressive deterioration of the physiological functions associated with the ageing process.

The true nature of the pathogenesis of hearing loss of the aged (presbycusis) has remained obscure but generally agreed to be multi-factorial including genetic and environmental factors². The principal lesions to be recognized are a loss of hair cells in the basal and apical areas of the cochlea, loss of neurons and nerves fibres of the spiral ganglion and spiral nerves, and vascular changes and atrophy affecting the stria vascularis³

Although, the basic tenet of four pathological types of presbycusis has remained valid however Schuknecht and Gacek in a recent paper have emphasized that many aging ears show combinations of pathological types

thus describing mixed presbycusis type and most audiograms in this type tend to be mixtures⁴.

Also indeterminate presbycusis has been described and applied to a group of cases that do not show light microscopic evidence of cochlear changes but clinically show as a bilateral symmetrical sensorineural hearing loss which progresses with age and without other obvious cause⁴.

The clinical presentations of presbycusis varies from patients to patients ranging from progressive hearing loss, tinnitus, or combination of the two, and is as a result of the various combinations of cochlear and neural changes that have occurred.

Presbycusis is not curable but many ways exist to help enable patients to mitigate the effects of the disease on their life and these include amplification devices, lip reading, assistive listening devices and cochlear implants.

The prognosis with presbycusis is further progression of hearing loss however the progression of loss is slow and patients may be able to expect many years of serviceable though diminished hearing.

Cerumen auris has been found to be commoner at the extremes of life due to immature or loss of the self-cleansing migration mechanism of the outer ear⁵. Wax is usually expelled by migration, a process that is aided by jaw movement⁶.

In this study Cerumen auris (26.3%) constituted the second most otological problems encountered among the geriatrics. The quantity of wax produced varies greatly from an individual to another and its composition varies in different racial groups and excess wax may reflect local and systemic disease⁷.

Most Caucasians and Negroes have the so-called 'wet' phenotype with moist honey-coloured cerumen; in contrast Mongoloid races tend to have grey granular, brittle cerumen, the 'dry' phenotype.

The symptoms of Cerumen auris include deafness, tinnitus, reflex cough, through stimulation of the auricular branch of the vagus nerve, earache or fullness in the ear

and vertigo. The superimposition of impacted Cerumen auris and presbycusis may significantly alter the ability of this geriatrics to function socially and many of them feel a subjective improvement in hearing after its removal. Cerumen auris often blocks hearing aid moulds causing unnecessary difficulties to those whose hearing is already compromised especially those geriatrics using hearing aids.

Ceruminolytics, syringing, suction or hooking it out under vision are the various ways of removing and treating cerumen auris. In case of syringing it has been suggested that after at least three attempts of ear syringing for cerumen auris and if it persists despite effective applications of ceruminolytic agents prior to irrigation, the procedure should be discontinued and other methods of imparted cerumen auris removal should be employed⁵.

It is of note that we did not find any case of presbystasis, which is a dysequilibrium of aging and usually present as balance disorders, among our studied subjects.

Presbystasis is due to degeneration in the vestibular apparatus characterized by loss of hair cells primarily in the ampulla, decrease in the vestibular nerve axons and neurons in the vestibular nuclei, and a reduction in the gain of the vestibular ocular reflex⁸. The significance of vestibular dysfunction cannot be overstated because of the risk of falling.

An estimated 30-50% of persons 65 and older fall in a given year, after age 80 that increase to 50% of persons falling and falls are a serious cause of morbidity in this age group with 1% of falls suffering a hip fracture and 5% some other type of fracture and roughly half of hip fracture patients never recover normal functions again⁸.

Common nasal complaints among geriatrics patients are nasal obstruction, rhinorrhoea, epistaxis, and olfactory dysfunction. Nasal complaints are also common in the remainder of the population but there are factors that are responsible for these complaints more in the elderly patients.

The factors that can lead to increased sino-nasal inflammation in elderly include a decrease in immune function, mucociliary

dysfunction, allergies, dehydration, and thickened nasal secretion⁹.

These factors must have been responsible for the rhino-sinusitis (64.5%) that constituted the main rhinological problems seen among the geriatrics that were studied. Treatment of this clinical condition should include humidification, sinus/nasal irrigations, appropriate antibiotic therapy and sinus surgery when indicated.

Cancer is common in geriatrics patients and aero-digestive tract squamous cell carcinoma, basal and squamous cell skin cancers, thyroid malignancies, salivary gland malignancies, and lymphomas are all encountered in elderly patients¹⁰.

In this study laryngeal carcinoma (45.5%) constituted the main pharyngo-laryngeal problems found among the geriatrics studied, followed by pharyngo-laryngitis (27.3%).

The incidence (as opposed to mortality) of cancer of the larynx, in common with most head and neck cancers, increases with increasing age¹¹. It is reasonable to accept that although no close and irrefutable aetiological factor can be designated, there are several often-related environmental factors which are clearly associated with an increased incidence of laryngeal cancer, i.e. tobacco, alcohol, environmental (urban) pollution, asbestos, therapeutic radiation and possibly genetic factors¹².

The significance of this is that some of this geriatrics must have been exposed to some of these aforementioned aetiological factors one time or the other previously.

The symptoms of laryngeal carcinoma are not greatly different from those of any space occupying lesion of the larynx but certain features make it more distinguishable namely progressive and unremitting dysphonia, dyspnoea, stridor, pain, dysphagia, neck swelling, while anorexia, cachexia are usually late symptoms. The treatment for this condition is usually surgery, radiotherapy, or combination of both.

Most elderly patients with head and neck cancers are able to tolerate cancer surgery fairly well. Understandably, their increased

incidence of coexistent diseases makes treatment more hazardous but with the proper patient selection, they can do well.

Many changes occur in the face and neck with age and in the skin, there are loss of tone, dynamic and static wrinkling, pigmentary changes and gravitational descent of the skin and underlying soft tissue¹³. Cosmetic procedures to address these changes include chemical peels, laser skin resurfacing, Botox injection and rhytidectomy¹³.

Geriatrics patients are leading longer lives with a much greater period of health and activity than in decades past and this group of patients will increasingly demand cosmetics procedures to provide a youth-full appearance.

Presently, from this study, there has not been any demand for cosmetic procedures to improve appearance by the geriatrics studied. It is anticipated that in the near future there would be increasing demand for cosmetic procedures by our geriatrics to provide a youth-full appearance, hence the Otolaryngologist must be prepared for this aspect of geriatrics care.

CONCLUSION

In conclusion, presbycusis, cerumen auris, rhino-sinusitis, and laryngeal carcinoma were the main otorhinolaryngological presentations seen among the geriatrics studied. With the explosive growth of the elderly population, this group will become a larger percentage of patients in the future and Otolaryngologist would need to be prepared to take care of these categories of patients adequately. Current and newly developed information relating to geriatrics in otolaryngology must be incorporated into present training of Otolaryngologist. Continuing education programs in geriatrics otolaryngology should be provided for all physicians in family practice to ensure early referral of such cases to ORL specialists.

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