

that in comparison with the healthy controls group, MDA concentration was significantly high and TA was significantly low in untreated TB patients; but significant differences in serum lipids and lipoproteins levels between the groups were not found. The finding of high serum MDA and low TA status in TB patients fits in very well with the results of other studies performed in Turkey,⁵ Ethiopia,² India⁴ and Africa.³ These results demonstrate that pulmonary TB is associated with increased oxidative stress and suggest that therapeutic approaches to the prevention of free radical damage such as food fortification and nutritional education programs, as well as appropriate anti-oxidant therapy, may be important to diminish oxidative damage in such patients. The significant inverse correlation between MDA and TA indicates that increased MDA may be considered as a notable factor causing TA reduction in these patients. Due to unchanged levels of lipids profile in such patients, the measurement of oxidized LDL may be helpful in definition of the cause of atherosclerosis in these patients. Further studies with large number of patients are required to confirm the efficacy of antioxidant therapy in the treatment of TB patients.

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Epistaxis. A five-year review

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A medical emergency deserves appropriate and timely intervention. Epistaxis is one of such emergency seen by Otolaryngologists. Nasal circulation is complex but epistaxis is usually described as either anterior or posterior with anterior epistaxis being common in children and young adults whereas posterior epistaxis is more often seen in older adults and the elderly.¹ Several treatment modalities have been proffered. The introduction of Hopkins rod in the management of epistaxis allows diagnosis and treatment to become more precise. This facility is not available in most centers in Nigeria, and where available cost is a major limitation to its routine use. The treatment frequently offered in major Ear, Nose and Throat (ENT) departments is nasal pack, which has being noted to be simple and cost effective.² This paper highlights the burden, which epistaxis constitutes, and how it has been managed over a 5-year period in otorhinolaryngological practice in Ilorin, middle belt region of Nigeria.

This was a retrospective study carried out on patients who presented with epistaxis at the University of Ilorin Teaching Hospital over a 5-year (1999–2003) period. Information on these patients was retrieved from hospital's patients' attendance register and case notes after due permission from relevant hospital authorities. These patients were classified into those who presented at the accident and emergency unit (adult and pediatric), patient who presented at the routine ENT clinic as out patients or referred from other departments. Data extracted included age, gender, causes of epistaxis, treatment offered and other associated ENT presentations. A simple descriptive analysis of the data obtained was carried out.

A total of 1153 cases of adult and pediatric emergencies were seen during the period under review; 342 (29.6%) were aural; 508 (44.1%) were nasal and 303 (26.2%) were throat related. Epistaxis constituted 46.5% of the nasal emergencies while foreign bodies in the nose constituted 20.4%, acute rhino sinusitis 11.2%, cerebrospinal fluid (CSF) rhinorrhea 10.2%; nasal furunculosis 9.8% and septal

hematoma/septal abscess 1.9%. Epistaxis accounted for 2.9% of total ENT patients load during the period under review with 73.3% of the cases presenting in the emergency ward as acute bleeding while 26.7% presented in the ENT clinic as chronic or recurrent bleed. The peak age incidence was in the 3rd and 4th decades of life constituting 42.9%. The prevalence in the over 70 years of age was low (4.7%). There was a male to female ratio of 3:2. Trauma was the most common etiological factor (32.6%). In 17.4% there was associated hypertension. Sino nasal tumor was found in 8.7%, nasopharyngeal tumor 3.7% and bleeding septal polypus 3.1%. Bleeding disorder was noted in 4.4%. No cause of epistaxis was found in 30.1% of the patients. (Table 1). Nasal packing was the most frequent modality of treatment; anterior nasal packing was carried out in 27.9% and posterior nasal packing in 3.5%. Other modalities of treatment offered include chemical cautery: Silver nitrate 5.4%, electrical cautery 3.5% and nasal clearance of tumor (8.3%). Adjunct radiotherapy for malignant tumor was given to 3.5% of patients while medical treatment given for underlying disease (6.7%) include whole blood transfusions in 4.8% and nasal decongestants and antibiotics in 23.1%. Approximately 13.5% had more than one form of treatment.

This study showed that nasal pathologies constituted the predominant cases seen at the emergency unit by the Otorhinolaryngologist in this center. Epistaxis alone accounted for almost half of the nasal pathologies. Epistaxis however constituted a small fraction (2.9%) of total ENT emergency cases seen during the same period. Epistaxis is a cause of panic to patients and patient's relations who most of the times have tried various home remedies to stop the bleeding. It was only failure of such efforts that made hospital presentation inevitable.³

The predominant age groups affected by epistaxis as shown in this study were 21-30 years and 31-40 years age groups with the condition occurring with

least frequency in those above 70 years of age. Similar peak age distribution in epistaxis has been observed in other parts of the country.² Patients above 70 years are few in the general population in our environment, considering our current life expectancy.^{3,4}

Trauma was the most common etiological factor revealed by this study. This trauma varies from minor injury such as nose picking to varying degrees of nasal injury from road traffic injury.⁵ The nose being a prominent feature on the face is highly susceptible in craniofacial injury. Most of our patients with epistaxis from trauma were actually victims of road traffic injury; some of them had accompanying CSF rhinorrhoea.⁵ Trauma being the most common cause of epistaxis may be can partly explain the frequency of this problem in males. This group is the adventurous vibrant group in our community. They are often on the road in search of economic well-being as in most African settings males are the breadwinners. Such searches may involve long/short distance journey thereby making them prone to such accidents.

Idiopathic epistaxis was the next most common form of epistaxis. This is in discordance with what was found in the Eastern part of Nigeria where it represented the dominant form.² Hypertension as an associated medical condition was noted in 17.4% of our patients; some of these patients were diagnosed for the first time when they presented with severe epistaxis while others were previously known hypertensive patients. Hypertension as a disease is not a primary known cause of epistaxis but it has been observed that when epistaxis occurs in hypertensive patients the bleeding tends to be profuse due to reduced contractile/retractile strength of the tunica media due to atherosclerosis occasioned by the effect of long standing hypertension on this patients.

Sino nasal and nasopharyngeal tumors patients with epistaxis were least seen cases. A good number of other causes of epistaxis such as nasal irritants, crusting from dry weather, recorded in literature¹ were not seen in this study may be as this study was hospital based, and also bleeding from these aforementioned cause is mostly mild and transient.

The management of epistaxis is well summarized in an age-old dictum: resuscitate the patient, establish the bleeding site, stop the bleeding and treat the cause of epistaxis. In clinical setting, what is carried out depends on the state of patient at presentation. Anterior nasal packing with gauzed glove finger packing was the most frequent modality of treatment in this study. This form of treatment was reported as an effective treatment in some centers in Nigeria,² although materials used for the packing vary from center to center. The few patients that had postnasal packing

Table 1 - Etiology of epistaxis in the study population

Causes of epistaxis	No. of patients (%)
Trauma	105 (32.6)
Associated hypertension	56 (17.4)
Sino nasal tumor	28 (8.7)
Bleeding disorder	14 (4.4)
Nasopharyngeal tumour	12 (3.7)
Bleeding septal polypus	10 (3.1)
Idiopathic	97 (30.1)
Total	322 (100)

were mainly patients with hypertension. They also had anterior nasal packing concomitantly to make the postnasal pack more effective. Complications of nasal packing include septal hematoma, sinusitis, syncope during insertion of nasal pack, pressure necrosis of the alae nasi, toxic shock syndrome. None of our patients suffered this due to adequate precautions such as technique of insertion of the pack, use of antibiotics and nasal decongestant were administered as some of the adjunct treatment to forestall this. Cauterization in the form of electrical cautery (3.5%), and chemical cautery (5.4%) using silver nitrate were carried out for a group of patients where the bleeding points could be identified during examination. Surgery carried out was mainly in form of excision of suspicious area during examination under anesthesia. The specimens were subjected to histology, and where the lesion was malignant a post operative radiotherapy was offered as adjunct.⁴ Blood transfusion was administered in only 4.6% of our patients. They were mostly hypertensive patients and victims of road traffic injury who have had significant blood loss before presentation. This percentage although small is of clinical significance when all the risks associated with blood transfusion are considered. In retrospect, a prospective study would have been more appropriate since data excluded on the ground of being incomplete would have been minimized. Also a much larger, multi-center study will give a better evaluation of the burden of epistaxis in Nigeria.

In conclusion, epistaxis constitutes a major ENT emergency in Nigeria; adults are dominant victims. Trauma has been identified as a major cause and insertion of nasal pack plays significant role in the management of these patients. Late presentation and other comorbid conditions may conspire to subjugate efforts of the attending physician.

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Treatment of alopecia areata by topical diclofenac sodium gel in comparison to benzoyl peroxide gel. A novel single blind therapeutic clinical trial

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Alopecia areata (AA) is a common skin disease characterized by a rapid onset of non-scarring hair loss in a sharply defined area. Any hair-bearing surface may be affected, especially the scalp.¹ There are many modes of therapy in the treatment of AA including both topical and systemic acting through different mechanisms like non-specific irritants (such as anthralin, garlic, onion and phenol), immune inhibitors (such as topical steroids and psoralen + ultraviolet light A), sensitizers or immune enhancers (such as contact dermatitis induction by dinitrochlorobenzene, squaric acid dibutyl ester and diphenylcyclopropenone) and others like; inosiplex, minoxidil, herbs, vitamin supplement, heat treatment and electrotherapy.³ Diclofenac sodium is one of the non-steroidal anti-inflammatory drugs. It is used for post-traumatic inflammation of tendons, ligaments, muscles, and joints, also for localized form of soft tissue and degenerative rheumatism.

Benzoyl peroxide is an antibacterial agent, which is effective against *Propionibacterium acnes*. The action is believed to be responsible for its usefulness in acne, and its active ingredient exerts a desquamative and antibacterial action, so it provides mild peeling and keratolytic activity.

The aim of this work is to assess the effectiveness and safety of topical 1% diclofenac sodium gel in comparison with 5% benzoyl peroxide gel in the treatment of AA. This single blind therapeutic clinical trial was conducted in the Department of Dermatology and Venereology in Baghdad Teaching Hospital, Baghdad, Iraq, during the period from December 2003 - October 2004. Fifty-two patients with patchy AA were enrolled in this study. The patients ages ranged between 4-40 years (19.68 ± 11.54 years),