



A study on epidemiology of epistaxis and its management in a private hospital

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ABSTRACT

Introduction: Although most cases of epistaxis are relatively minor and manageable with conservative measures, sometimes the malady can present as a life-threatening problem. **Materials and Methods:** The study was done in Department of ENT, Tirumala Hospital, Kadapa, AP, over a period of 1 year from January 2012 to December 2012. 100 study subjects with epistaxis were studied. **Results:** A prospective study was conducted. Among the study subjects the maximum cases were from 40-60 year age group- 47% followed by >60 year age group (26%).

Keywords: Epistaxis, Trauma, Hypertension, Malignant neoplasm, Etiology, Kadapa

INTRODUCTION

Epistaxis or nose bleed is a symptom of a large number of widely diverse conditions. It is a frequent otolaryngological emergency. Although most cases of epistaxis are relatively minor and manageable with conservative measures, sometimes the malady can present as a life-threatening problem.¹ The appropriate management strategy depends on both the aetiology and the anatomical classification into anterior or posterior bleed. Epistaxis is the commonest emergency in otolaryngology and often requires admission to the hospital. Management of this condition has changed over the past few years, with ongoing research in the field.²

All cases of epistaxis, regardless of the aetiology, have a common bleeding pathway from the superficial and highly vascular tissue and vessels of the nose. It can be classically divided on the basis of anatomical location into anterior or posterior nasal bleed. About 80% of epistaxis cases are anterior bleeds, usually from the Kiesselbach's plexus located in the lower anterior part of the nasal septum, known as the Little's area.²

The two most common identifiable local causes of epistaxis are trauma (due to nose picking and foreign bodies) and inflammation secondary to

infection or allergic rhinosinusitis. It is important to exclude a neoplasm (for example malignant squamous cell carcinoma) as a local cause for epistaxis and for this reason it is compulsory that all patients have a thorough nasal examination prior to discharge.²

Objectives: A study on epidemiology of epistaxis and its management in a private hospital.

MATERIALS AND METHODS

The study was done in Department of ENT, Tirumala Hospital, Kadapa, AP, over a period of 1 year. The study period was from January 2012 to December 2012. Among the total out patients with epistaxis, 100 study subjects were enrolled using consecutive sampling. This prospective study was done on patients who presented with complaints of nasal bleeding in the Outpatient department of Otorhinolaryngology, Tirumala Hospital, Kadapa, AP.

A detailed history, physical examination and laboratory assessment to rule out the various causes of epistaxis had been done. Details of management of epistaxis such as medical treatment, nasal packing, cauterisation and more definitive surgical interventions such as open reduction and internal fixation were collected. The data was analyzed.

RESULTS

Table 1: Distribution of study subjects in relation to age groups

Age (years)	Total No. of patients	Percentage
<20	15	15
20-40	12	12
40-60	47	47
>60	26	26
Total	100	100

Among the study subjects the maximum cases were from 40-60 year age group- 47% followed by >60 year age group (26%).

Table 2: Distribution of study subjects in relation to sex

Sex	Total No. of patients	Percentage
Females	36	36
Males	64	64
Total	100	100

Among the study subjects, the maximum were males (64%). Females were 36%.

Table 3: Distribution of study subjects based on etiology

Etiology	Total No. of patients
Trauma	8
Hypertension	26
Infection of sinuses	3
Polyp	5
DNS	6
Nose picking	10
Idiopathic	42
Total	100

Among the study subjects, the commonest cause of epistaxis was Idiopathic- 42%, followed by Hypertension - 26% and nose picking-10%.

Table 4: Distribution of study subjects based on management

Type of management	Number of patients(n)	Percentage
Medical	50	50
ANP (anterior nasal packing)	22	22
ANP and PNP (posterior nasal packing)	1	1
Septoplasty	6	6
Cautery	3	3
FESS (Functional endoscopic sinus surgery)	3	3
Excision	5	5
Total	100	100

Among the study subjects, medical management was done for 50% cases. ANP was done for 22% of study subjects.

DISCUSSION

Epistaxis- bleeding through the nose is one of the most common and most difficult emergencies to treat. Most episodes are minor in nature but in some cases there could be massive bleeding. Epistaxis can be from anterior or posterior source and it can be from septum or lateral nasal wall. Both systemic and local factors play a role.

The results of this study revealed the most common cause of epistaxis as idiopathic -42%, which is consistent with other studies. Most cases are idiopathic, spontaneous bleeds without any proven precipitant or causal factor in studies done by Stell et al,³ Pollice and Yoder,⁴ Tan and Calhoun,⁵ Pond and Sizeland et al.⁶

Among the study subjects, the maximum were males (64%), which is consistent with other studies. The male preponderance of epistaxis has been documented in literature.^{1,7-9} In a study done by Anie et al,¹ they reported that more males were affected than females, with a male to female ratio of 2.4:1, except in the geriatric age group where there is no significant sex difference.

Among the study subjects, the commonest cause of epistaxis was Idiopathic- 42%, followed by Hypertension - 26% and nose picking-10%. The findings are in consistent with other studies.² Hypertension due to poor blood pressure control being the second commonest cause in this report. Earlier report from Nigeria also showed that some patients had epistaxis when their Hypertension was not controlled due to cessation of antihypertensive drug therapy.¹⁰ Varshney and Saxena¹¹ recorded hypertension as the second commonest cause of epistaxis after idiopathic causes in India.

Conservative measures with medical management and anterior nasal packing were the most common non-surgical measures accounting for 50% (n=50) and 20% (n=20), respectively. The management of epistaxis was complex and varied. A myriad of treatment regimes can be found in the literatures. Control of haemorrhage, minimizing the length of hospital stay, low complications and cost effectiveness are the goals of all methods of therapy.¹

Conclusion: The commonest cause of epistaxis in both sexes was found to be idiopathic (42%). Other causes are hypertension, nose picking etc. More common in males when compared to female.

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