



PREVALENCE OF HYPERTENSION IN PATIENTS WITH EPISTAXIS- A RETROSPECTIVE REVIEW AT A TERTIARY CARE HOSPITAL

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ABSTRACT

Introduction: Epistaxis is the most common emergency.

Aim and Objective: This 2 year Retrospective study was aimed to estimate the prevalence of Hypertension in patients with Epistaxis.

Study design: Retrospective Study.

Material and Method: The study was carried out among the 196 admitted patients with epistaxis who were managed in the Department of ENT, SKIMS MCH, Bemina during a period of 2 years. Results: In our study, prevalence of Hypertension was around 54.5% in patients admitted with Epistaxis.

Conclusion: All patients with epistaxis especially elderly should undergo regular Blood pressure monitoring which could be possible cause of epistaxis.

KEYWORDS : Epistaxis, Hypertension, Prevalence.

INTRODUCTION:

The term 'epistaxis' is Latin, derived from the Greek, epistazein (epi – above, over; stazein –o drip).¹ Epistaxis is a common symptom of diverse conditions which may present as mild recurrent bleeds or severe life threatening rhinological emergency.² According to some studies, as many as 60% of the population suffer from epistaxis in their lifetime.^{3,4} Epistaxis is one of the commonest ENT emergencies requiring hospital admission. Although predominantly a benign condition regardless of its etiology, epistaxis can be severe, particularly in elderly and/or frail patients, requiring hospitalization and aggressive management including repeated nasal packing, blood transfusion, arterial embolization or surgery.⁵⁻¹⁰

Epistaxis can be classified as anterior and posterior epistaxis based on the site of origin.¹¹ Anterior epistaxis is more common than posterior epistaxis.¹² It usually arises either from Kiesselbach's plexus, a rich vascular anastomotic area formed by end arteries, or from vein (retrocolumellar vein). As the bleeding site is accessible, anterior epistaxis which occurs more frequently in children and young adults is rarely serious. On the other hand posterior epistaxis arises from the area supplied by sphenopalatine artery in the posterior part of nasal cavity, which is more frequent in elderly people. Usually there is profuse bleeding with difficulty in accessing the site of bleed so it poses challenge in the management.¹³

Epistaxis can be posttraumatic, iatrogenic or spontaneous, resulting from numerous possible causative factors including local nasal factors (inflammation, infection), medications, and systemic factors such as platelet and coagulation abnormalities, alcoholism, hereditary hemorrhagic telangiectasia and hypertension.^{5-10,17} Hypertension has been considered to be a major cause of spontaneous epistaxis for a long time.^{14,15} However, particularly in the recent medical literature, the relationship between hypertension and epistaxis appears to be more controversial.^{16,17}

AIM OF STUDY:

The study was aimed to estimate the prevalence of hypertension among patients with epistaxis admitted in our institute.

MATERIAL AND METHODS:

A retrospective study was carried out among the admitted

patients with epistaxis who were managed in the Department of ENT, SKIMS MCH, Bemina during a period of 2 years from September 2017 to August 2019.

A total number of 196 patients were admitted in ENT ward of our institution during the study period. The information on age, gender, symptoms, and management was obtained from the case records. In all the cases, initial brief history followed by detailed history after the management of acute symptoms were taken followed by general physical examination and local ENT examination. Complete hematological investigations were recorded. Daily blood pressure measurements of all patients were noted from vital charts of patients. Records of consultation and opinion of the cardiologist was obtained from the case records. The mean of all BP measurements during hospitalization was determined and patients with mean BP of > 140/90 mmHg were considered to be hypertensive.

INCLUSION CRITERIA:

- Male and Female patients of any age
- Patients admitted to the ENT department with a diagnosis of serious spontaneous epistaxis requiring at least one nasal pack.

EXCLUSION CRITERIA:

- Patients with minor epistaxis easily managed by first aid measures and/or successful local treatment (cauterization).
- Posttraumatic epistaxis.
- Patients with Chronic Liver disease, Chronic Kidney disease or coagulation disorder.
- Patients on anti-thrombotic drugs.

RESULTS:

A total of 196 patients with epistaxis were included in the study. There were 118 males patients and 78 female patients with M:F ratio of 1.5:1. Hypertension was present in 107 patients i.e. 54.5% and 89 i.e. 45.4% patients were non hypertensive.

Table 1:

MEAN B.P	NO.	%
> 140/90 mmHg	107	54.5
< 140/90mmHg	89	45.4

Out of 107 patients of Hypertension, 58 were females

representing 54.2% and 49 were males representing 45.8% with F:M ratio of 1.1:1.

Table 2: Age-wise distribution of Hypertension

Age group	No.	%
<20 years	0	0
20-40 years	13	12.1
40-60 years	41	38.3
>60 years	53	49.5

The above table shows that there is a steep rise in prevalence of hypertension in patients with epistaxis with increase in age and is maximum in epistaxis patients with age >60 years.

DISCUSSION:

In our study of 196 patients, 118(60.2%) were male patients and 78(39.8%) were female patients. Thus males were affected more often than females with M:F ratio of 1.5:1. In the study done by Nabil A Sarhan et al(2014)², there were 27(67.5%) males and 13 (32.5%) females. In another study done by Ramesh Parajuli (2015)¹³, 52 were males and 32 were females with M:F ratio of 1.6:1. In a study done by Kalpana Sharma et al(2015)¹⁸, there were 176 male patients and 67 female patients with M:F ratio of 2.6:1.

Our study showed overall prevalence of Hypertension in patients with epistaxis was around 54.5%. In the study done by Nabil A Sarhan et al(2014)² and Kalpana Sharma et al(2015)¹⁸, the prevalence of Hypertension reported was 45% and 59.25% respectively. Our observation is in accordance with prevalence as observed by above authors. Out of 107 patients of Hypertension, 58 were females and 49 were males with F:M ratio of 1.1:1. Eliezer Kitai et al(2007)¹⁹ showed a similar trend with females predominating males in prevalence of Hypertension. The prevalence of hypertension in patients with epistaxis increases with age and is maximum in epistaxis patients with age >60 years. Epistaxis associated with hypertension in elderly becomes difficult to control requiring more aggressive interventions.

CONCLUSION:

Epistaxis is a common emergency condition in otorhinolaryngology and is a leading cause of hospitalization in elderly patients. A comprehensive management of the underlying cause is required to decrease the morbidity associated with epistaxis. Our study concluded that all patients with epistaxis especially elderly should undergo regular Blood pressure monitoring which could be possible cause of epistaxis.

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