

Research Article

Clinical profile of epistaxis patients presenting at DHQ Hospital, Sahiwal

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ABSTRACT

Objective: To study the clinical profile of epistaxis patients presenting at DHQ Hospital, Sahiwal.

Material and methods: This prospective study was conducted at Department of Otorhinolaryngology, Head & Neck Surgery DHQ Hospital, Sahiwal from January 2018 to December 2018 over the period of one year. Total 100 patients who presented with epistaxis during the period having age between 10-70 years either male or female from emergency department, ENT OPD and referral from other departments were included in the study.

Results: The mean age of patients was 35.77 years. Out of 100 patients of epistaxis, male patients were 60 (60%) and female patients were 40 (40%). Most common etiology was hypertension in 21 (21%) patients followed by Acute rhino-sinusitis 14 (14%) patients, Trauma 12 (12%) patients, Inflammatory polyp 9 (9%) patients, Septal spur 8 (8%), Nose picking injury of septum 8 (8%), Naso pharyngeal carcinoma 4 (4%), Sino nasal papilloma 5 (5%), Rhino-sporidiosis 3 (3%), Haemangiomas polyp 2 (2%), Capillary hemangioma of septum 1 (1%), Alcoholic liver diseases 2 (2%), Drug induced 2 (2%) and Idiopathic in 8 (8%) patients.

Conclusion: Results of present study showed male predominance in epistaxis patients. Most of the patients were below 50 years of age. Posterior epistaxis was the common site of epistaxis and most common etiology was hypertension.

Key words: Epistaxis, etiology, hypertension, anterior, posterior

INTRODUCTION

Epistaxis is a symptom of various conditions and is a common occurrence. The term epistaxis is Latin, derived from the Greek word 'EPISTAZEIN' which means to flow, drop by drop.¹ True incidence is therefore unknown but epistaxis is estimated to occur in 60% of individual's worldwide and 6% of them seek

medical attention.² A slight male preponderance with 55% male and 45% female has been reported.³⁻⁴ Epistaxis as seasonal variation can occur more frequently during the dry hot and cold winter months.⁵ Epistaxis is divided into anterior and posterior epistaxis depending on the site of origin.⁶ Anterior nose bleeds arise from the

Little's area and common in children and young adults. Posterior nose bleed arise from damage to the posterior nasal septal artery and common after 40 years of age.⁷⁻⁸ Anterior epistaxis is far more common than posterior epistaxis, accounting for more than 80% of cases.⁹

The causes and course of epistaxis is probably multi-factorial. Causes of epistaxis can be categorized in many ways but broadly into local and general causes. Aetiology of epistaxis has been reported to vary according to age and anatomical location.¹⁰

Local causes ranges from trauma, infection, neoplasms of nasal cavity paranasal sinuses and nasopharynx to rare congenital causes. While general causes includes hypertension, blood and blood vessel disorders, bleeding disorders, to liver and renal disorders. Epistaxis due to trauma is more common in younger individuals and is most often due to digital trauma, facial injury, or a foreign body in the nasal cavity.¹⁰

Non traumatic epistaxis is more common in older patients. Epistaxis that occurs in children is usually mild and originates in the anterior nose. Epistaxis that occurs in older individuals is likely to be severe and originates posteriorly.¹¹

MATERIAL AND METHODS

This prospective study was conducted at Department of Otorhinolaryngology, Head & Neck Surgery DHQ Hospital, Sahiwal from January 2018 to December 2018 over the period of one year. Total 100 patients who presented with epistaxis during the period having age between 10-70 years either male or female from emergency department, ENT OPD and referral from other departments were included in the study.

History of all the patients was taken and physical examination was done with attention to pulse rate,

BP, temperature, subcutaneous bleeding and pallor. Liver and spleen was also assessed. Detailed ENT examination was done. Complete blood chemistry and coagulation profile were done in each and every case.

Histopathological examination and radiological investigations were done when necessary. In addition to above investigations, routine urine examination, blood sugar, blood urea, serum creatinine, and E.C.G. were done in appropriate cases.

The observations were tabulated and analysed. The results obtained were represented as frequency and percentage.

RESULTS

In present study, the mean age of patients was 35.77 years. Out of 100 patients of epistaxis, male patients were 60 (60%) and female patients were 40 (40%). (Fig. 1) Selected patients were divided into three groups according to age i.e. age group 10-30 years, 31-50 years and 51-70 years. Total 25 (25%) belonged to age group 10-30 years, 40 (40%) patients belonged to age group 31-50 years and 35 (35%) patients belonged to age group 51-70 years.

(Fig. 2) Total 27 (27%) patients found with anterior epistaxis and 73 (73%) patients were found with posterior epistaxis. (Fig. 3) Most common etiology was hypertension in 21 (21%) patients followed by Acute rhino-sinusitis 14 (14%) patients, Trauma 12 (12%) patients, Inflammatory polyp 9 (9%) patients, Septal spur 8 (8%), Nose picking injury of septum 8 (8%), Naso pharyngeal carcinoma 4 (4%), Sino nasal papilloma 5 (5%), Rhino-sporidiosis 3 (3%), Haemangiomas polyp 2 (2%), Capillary hemangioma of septum 1 (1%), Alcoholic liver diseases 2 (2%), Drug induced 2 (2%) and Idiopathic in 8 (8%) patients. (Table 1)

Fig. 1: Gender Distribution

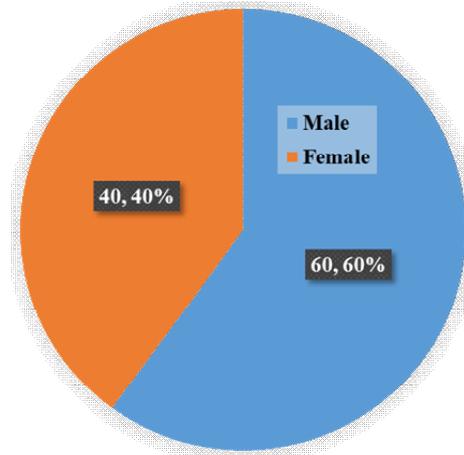


Fig. 2: Age distribution

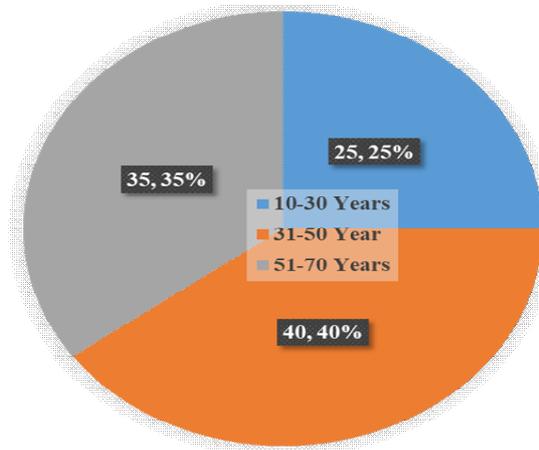


Fig. 3: Site of epistaxis

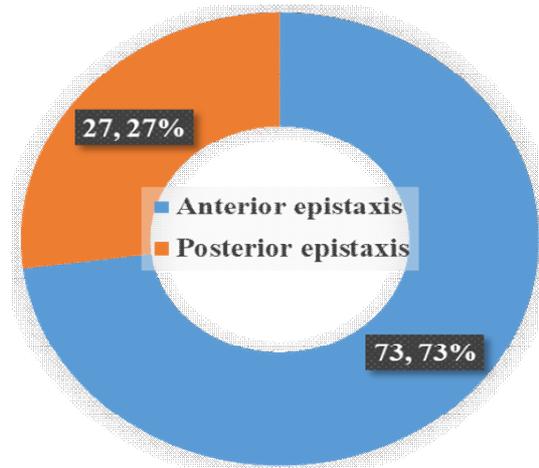


Table 1: Etiology of epistaxis in the present study

Etiology	N	%
Hypertension	21	21
Acute rhino-sinusitis	14	14
Trauma	12	12

Inflammatory polyp	9	9
Septal spur	8	8
Nose picking injury of septum	8	8
Naso pharyngeal carcinoma	4	4
Sino nasal papilloma	5	5
Rhino-sporidiosis	3	3
Allergic fungal sinusitis	1	1
Haemangiomas polyp	2	2
Capillary hemangioma of septum	1	1
Alcoholic liver diseases	2	2
Drug induced	2	2
Idiopathic	8	8

DISCUSSION

The objective of present study was to observe the clinical profile of epistaxis in patients presenting at DHQ Teaching hospital, Sahiwal.

Total 25 (25%) belonged to age group 10-30 years, 40 (40%) patients belonged to age group 31-50 years and 35 (35%) patients belonged to age group 51-70 years. The mean age of patients was 35.77 years. Literature suggests that prevalence of epistaxis is more for children less than 10 years of age and then rises again after the age of 35 years of age.¹² Gilyoma et al and Eziyi et al reported that epistaxis was more prevalent in the young adults <40 years.¹³⁻¹⁴ Varshney et al also reported most of their patients to be around 40 years.¹⁵ In a study by Jain et al. most common age group affected in epistaxis was 31-40 years.¹⁶ Similar results were also observed by Shah et al, where mean age was 32.24±12.54 years (4 to 82 years).¹⁷ The increased incidence of epistaxis in younger age is because of sports injuries and road traffic accidents due to their aggressive life style. On the other hand, the increased incidence in old age is likely to be due to vascular pathologies, hypertension and malignancy.

In present study, out of 100 patients of epistaxis, male patients were 60 (60%) and female patients were 40 (40%). Generally, males are more affected than females until the age of 50, but after 50, there was no difference between sexes in the literature.¹⁸⁻¹⁹ In a study by Shah et al, epistaxis was found to affect more males than females, with a male to female ratio of 1.8:1.¹⁷ Jain et al also

observed that males are affected more than females, with a male to female ratio of 2.9:1.¹⁶

In present study, total 27 (27%) patients found with anterior epistaxis and 73 (73%) patients were found with posterior epistaxis. These findings are in tandem with existing literature.²⁰⁻²¹ Anterior epistaxis arises of damage to Kesselbachs plexus at lower part of anterior nasal septum. Posterior epistaxis arises from damage to posterior nasal septal artery.²² In a study by Shah et al. anterior epistaxis was more common (69.29%) than posterior type (21.05%).¹⁷ Pandey et al in their study also observed that anterior nasal bleed occurred in 37 of 42 cases.²³ In a similar study by Jain et al,¹⁶ 92.2% had anterior nasal bleeding, 3.3% had posterior bleeding and the remaining 4.4% patients had non-identifiable bleeding sites.

Most common etiology was hypertension in 21 (21%) patients followed by Acute rhino-sinusitis 14 (14%) patients, Trauma 12 (12%) patients, Inflammatory polyp 9 (9%) patients, Septal spur 8 (8%), Nose picking injury of septum 8 (8%), Naso pharyngeal carcinoma 4 (4%), Sino nasal papilloma 5 (5%), Rhino-sporidiosis 3 (3%), Haemangiomas polyp 2 (2%), Capillary hemangioma of septum 1 (1%), Alcoholic liver diseases 2 (2%), Drug induced 2 (2%) and Idiopathic in 8 (8%) patients. Hypertension being the commonest cause in this study shows epistaxis results from poor blood pressure control. Much greater role has been attributed to hypertensive etiology in epistaxis in literature.^{15,24} The need for regular blood pressure check-up in epistaxis

patients and due address to hypertension is thus emphasized. Chaiyasate et al. reported hypertension to be the commonest cause of epistaxis followed by idiopathic causes.²⁵

CONCLUSION

Results of present study showed male predominance in epistaxis patients. Most of the patients were below 50 years of age. Posterior epistaxis was the common site of epistaxis and most common etiology was hypertension.

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