



A Study on Causes of Epistaxis in Adults: A Series of Total 100 Cases

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Abstract

Background: Epistaxis or nasal bleed is a symptom and it occurs in diverse conditions. This study is on epistaxis of 100 cases in adults, is to find out the most common causes for epistaxis, prevalence of epistaxis in either sex, age groups and for early identification of cause and management in rural health care system. Results were analysed.

Methods: Prospective study of series 100 cases in adults.

Results: Results were analysed and idiopathic was most common cause of epistaxis, males were more affected than females, and the most common age group affected was 13 to 30 years. Most cases were treated by conservative measures.

Conclusions: Idiopathic is the most common cause of epistaxis in this present study. Other causes are trauma, DNS with spurs, sinusitis and JNA in adolescent males. Males are more commonly affected than females. The most common age group affected is 13 to 30 years and 41 to 60 years. Most cases are treated by conservative measures.

Keywords: Adult, Epistaxis, Aetiology, Management.

Introduction

Bleeding from nose is a common condition in routine ENT practice. Almost 60% of population, at some point of their life experience epistaxis and about 6% need medical attention.¹

Nasal bleeding has been traditionally attributed to hot weather, but different studies reveal different seasonal variations.^{2,3}

Epistaxis itself is not a disease and is a symptom of many diverse conditions. Epistaxis can have an anterior or posterior source and can be from septum and even lateral nasal wall. Intractable epistaxis remains a challenge for E.N.T. surgeon. Historically, internal maxillary artery ligation via a transantral approach and ligation of the ethmoidal vessels and the external carotid artery have been

the treatment of choice when conservative management fails.⁴

Aims of the Study

1. To find out the most common aetiology of epistaxis.
2. Prevalence of epistaxis in each age / sex groups.
3. Early identification of the cause and thereby early management.

Methods

A prospective study done at civil hospital Nagrota bagwan and civil hospital Jwalamukhi, Kangra during June 2019 to June 2020 on patients above 12 years who reported with history of bleeding through the nose were examined and full head and neck

examination done after elaborating detailed history on 100 patients.

ENT examination was done to identify the bleeding source and to identify whether anterior or posterior bleeding is there. If bleeding was severe, anterior nasal packing and posterior nasal packing if necessary was done and all patients were admitted in the ward. Complete blood investigations including C.H.G.,R.F.T .and other relevant investigations like diagnostic nasal endoscopy with 0 and 30 degree sinusopes with topical 4% local anaesthesia with decongestant, X- ray, PNS/Chest, CTPNS, ECG are done for admitted patients. For the patients for whom no active bleeding or source identified at the time of examination were advised relevant investigations, treatment and follow up, while for active bleed packing was done using either lubricated medicated pack ,post nasal pack / Foley's catheter.

Inclusion Criteria

Inclusion criteria were age group above 12 years, history of bleeding through the nose.

Exclusion Criteria

Exclusion criteria were age below 12 years, patients with life threatening emergencies like traumatic epistaxis with poly trauma, stroke etc. and patients unwilling for study were excluded to give attention to immediate care of the patient.

Aetiology of epistaxis

The most common cause in this study is idiopathic (45.50%). Other causes noted are chronic sinusitis (14%), chronic sinusitis with D.N.S.(10%) , DNS with Spur and sinusitis (4.5%), trauma (4.0%), Hypertension, rhinosporidiosis, hematological causes are noted. Haemangioma, rhinolith, septal perforation and iatrogenic causes have also been noted. JNA has been noted in one adolescent male

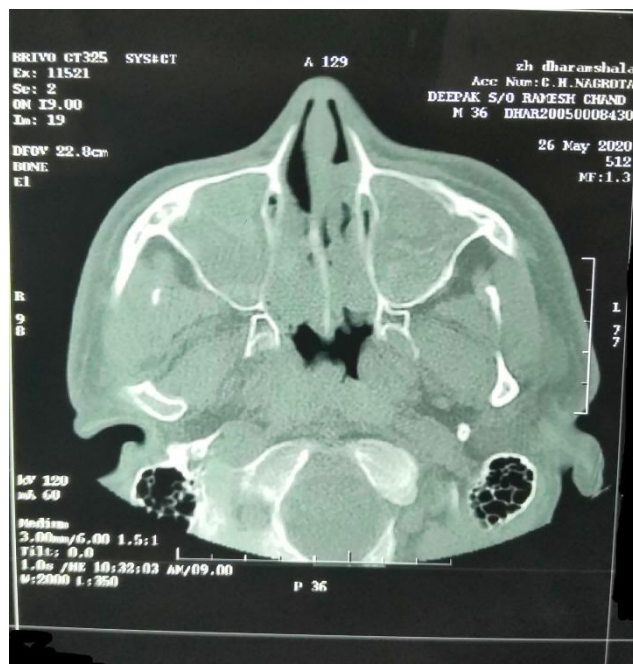


Figure 2 CT scan of a patient depicting massive sinonasal polyposis

Results

Table 1: Aetiology of epistaxis

Aetiology	% of male	% of female
Idiopathic	44	47
Trauma / RTA	5	3
DNS/ spur	5	4
Chronic sinusitis/DNS	8	11
JNA / Rec. JNA	1	0
Rhinosporidiosis	0	0
Polyps/sinonasal polyposis	0	0
Septal perforation	1	0
Rhinolith	0	1
Malignant growth maxilla	1	0
Bleeding polyposis	0	2
Chronic sinusitis	15	13
DNS	9	14
Granulation tissue septum	1	0
Hypertensive	5	2
Benign mass/Inv. Papilloma	0	0
Haemangioma	0	0
Iatrogenic	1	0
Low platelet count	4	3

Table 2: Age group of epistaxis with common causes in males and females

Age Group	Males	Females
13 – 20	JNA / Idiopathic	Idiopathic
21 – 30	Idiopathic	Idiopathic / Trauma / DNS, Sinusitis
31 – 40	Idiopathic / Trauma	Idiopathic / Sinusitis
41 – 50	Idiopathic / Hypertension	Polyps / Malignancy
51 – 60	Idiopathic	Hypertension / Idiopathic
61 - 70	Malignancy/ Idiopathic	-

Table 3: Male and female patients of epistaxis with age wise distribution.

Age group	Male	Female	Total
13 – 20	11	07	18
21 – 30	12	11	33
31 – 40	09	7	16
41 – 50	03	1	04
51 – 60	11	6	17
61 – 70	08	4	12

Table 4: Number of males and females in study group

S. no	Sex	No of patient	%
1	Male	62	62
2	Female	38	38
	Total	100	100

Table 5: Nature of bleeding

Anterior bleeding	75
Posterior bleeding	33
Ant + post bleeding	12

Table 6: Conservative Treatment given for epistaxis.

Nasal packing	No's
Anterior packing	65
Ant + post packing	15
Observation	20

The most common cause in this study is idiopathic (45.50%). Other causes noted are chronic sinusitis (14%), chronic sinusitis with D.N.S. (10%), DNS with Spur and sinusitis (4.5%), trauma (4.0%).

One case of JNA is noted in a second decade male, malignancy in a male in 5th decade and hypertension has been noted in older age group. Trauma has been noted mainly in 13 to 30 age group.

Most of the patients were treated conservatively. Anterior nasal packing was done in 65 patients and anterior and postnasal packing was done in 15 patients. 20 patients without active bleed during admission were kept under observation. Endoscopic cauterization of bleeding point was done in 21 patients and endoscopic cauterization of granulation tissue was done to one patient.

Discussion

Epistaxis i.e. bleeding through the nose is one of the most common and most difficult emergencies to treat. About 60% of people experience the episode at least once in life time and less than 10% of them require medical attention.

Most episodes are minor in nature. 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 or both. Both systemic and local factors play major role.

In the present study, 100 cases were studied from the outpatient department in two peripheral institutes CH Nagrota Bagwan and CH Jwalamukhi, Kangra(H.P.). In this study (Table 1) most cases were due to idiopathic cause (45.50%), while idiopathic, spontaneous bleeds without any proven precipitant or causal factor were the causes for epistaxis correlating with study by Stell and Shaheen.^{5,6}

In the present study (Table 2 and 3) more commonly affected age group are 21 to 30, 13 to 20. Next commonly affected age group is 51 to 60. Shaheen showed in his study of age distribution of epistaxis an increase in frequency between ages 15 – 25 years and 45– 65 years and this present study more or less correlates with the same.⁶

JNA occurs exclusively in adolescent males. This study also proves his sex.

Also epistaxis is more common in males than females (Table 4) and this study which correlates with studies of Juselius.⁷

In our study (Table 5) most cases were anterior nasal bleeds and were managed conservatively with anterior nasal packing similar to study by Juselius and O' Donnel et al.^{7,8}

Most cases were treated conservatively with anterior nasal packing (Table 6) (65 patients), some cases

whom were without active bleeding during admission were observed (20 patients) and some cases were treated with anterior and posterior nasal packing (15 patients).

Endoscopic cauterization of suspected bleeding point was done to 21 patients and endoscopic cauterization of granulation tissue of septum was done to one patient. The endoscopy helps to identify bleeding points and to treat them effectively. Recurrent bleeding was seen in eleven patients whom were controlled with conservative measures. Both previous episode and present episode were treated with anterior nasal packing. For surgical intervention patients were referred to proper higher centre.

Conclusion

The most common cause in this study is idiopathic (45.50%). Other causes noted are chronic sinusitis (14%), chronic sinusitis with D.N.S.(10%) , DNS with Spur and sinusitis (4.5%), trauma (4.0%), Hypertension, rhinosporidiosis, hematological causes are noted. Haemangioma, rhinolith, septal perforation and iatrogenic causes have also been noted. JNA has been noted in one adolescent male. Males (62%) are commonly affected than females (38%). The most common age group affected is 13 to 30 years (51%) and 41 to 60 years (21%). Most cases are treated by conservative measures. In older age groups radiological investigation is needed to rule out any malignancy. This series of 100 cases stands as a reference in our geographical area which will help the further researchers identify the causes and management of epistaxis region wise.

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