

A Study on Epistaxis in Government Siddhartha Medical College, Vijayawada

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Received: 25-04-2023 / Revised: 23-05-2023 / Accepted: 26-06-2023

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Conflict of interest: Nil

Abstract:

Epistaxis is an emergency in 60% of patients in lifetime, out of which 6% needs medical attention. It is defined as bleeding from nose. It is a sign not a disease. It affects both sexes.

Introduction: Epistaxis is an emergency in 60% of patients in lifetime, out of which 6% needs medical attention. It is defined as bleeding from nose. It is a sign not a disease. It affects both sexes.

Study Design: 1 year study from May 2022 to April 2023.

Objectives: It's a prospective study to analyse the causes and different methods of treatment for epistaxis.

Materials & Methods: It was conducted in Siddhartha medical college, Vijayawada for a period of 1 year from May 2022 to April 2023, these patients are distributed in sex and age variation. They were categorised into clinical, pathological diagnosis and based on modalities of the treatment. 383 patients attended with the complaints of epistaxis either with single episode 275 or multiple episodes 108.

Results: In my study males 59.5% (228), females 40.5% (155); M: F: 1.47: 1. Age group of 0-10 years with 51.7% was the most common age affected with epistaxis due to trauma to little's area 142 (37.0%) evolved a commonest aetiology. rhinosinusitis (28.19%), hypertension (12.53%), DNS with spur (3.65%), medical management was mostly used (32.1%) then local cauterisation and anterior nasal packing. Second most common age was 31-40 years.

Conclusions: Epistaxis common in males than in females. Little's area is the commonest site. Next is rhinosinusitis and hypertension, arises from the lateral wall of nose in adults.

Keywords: Epistaxis, Bleeding From Nose, Road Traffic Accident, Hypertensive Bleed, Little's Area.

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Introduction

Epistaxis is the commonest emergency records for 60% of the patient with 6% require medical attention[1]. It is bleeding from nose, it can occur in any patients. There are peaks of incidence for patients in both younger than 10 years old and above 40 years. Anterior part is more common in children, in adults posterior part is more common.

Aetiology is due to road traffic accident, fibro angioma, bleeding polyps, pyogenic granuloma, DNS with spur. Systemic diseases like hypertension, liver and kidney disorders. Cauterisation with AgNO₃, anterior and posterior packing was done as primary mode of treatment. At present foley's catheters, merocele packs, endoscopic ligation and cauterisation are done.

Design of Study: A Prospective study conducted from May 2022 to April 2023

Aims & Objectives

1. To assess the commonest cause of epistaxis
2. To assess different methods to control epistaxis.

Materials and Methods:

This study conducted in SMC, Vijayawada, AP. From May 2022 to April 2023. Out of 38,500 out-patients, 383 patients attended with complaints of epistaxis. 275 patients attended with single episode of epistaxis and 108 with recurrent episodes they were distributed according to age & gender, later they were categorised into 13 groups depending on the clinical and pathological diagnosis.

Once again, they are divided into 8 sections on the basis of treatment line medical management,

cauterisation, anterior nasal packing, posterior nasal packing, septal surgery, sinus surgery and other different surgical measures and irradiation.

Inclusion Criteria: All the patients with epistaxis attended as an outpatient and in-patient.

Exclusion Criteria: Iatrogenic epistaxis, epistaxis due to irradiation, epistaxis due to liver / renal / blood dyscrasias, idiopathic epistaxis.

Results:

Table 1: Sex distribution:

S. No	Sex	Number	Percentage
1.	Male	228	59.5 %
2.	Female	155	40.5

In this of epistaxis found to be male preponderance 59.5% (228) when compared to females 40.5%(155)

Table 2: Age distribution:

S.No	Age	No. of Patients	Percentage
1.	0-10	198	51.7%
2.	11-20	36	9.4%
3.	21-30	37	9.6%
4.	31-40	41	10.8%
5.	41-50	31	8.1%
6.	51-60	36	9.4%
7.	61-70	4	1%
Total		383	

0-10 year's age group 51.7% (198) was the most common age group presented with epistaxis. The second most common was the 31-40 years age group 10.8% (41) and the least affected was 61-70 years 1% (4).

Table 3: Causes of epistaxis:

Cause	No. of cases	(%)	Male	Female
Littles area	142	37.07	86	56
Trauma	35	9.13	22	13
DNS with spur	14	3.65	8	6
Foreign body	9	2.34	5	4
Rhinosinusitis	108	28.19	58	50
Hypertension	48	12.53	32	16
Fibroangioma	13	3.39	7	6
JNA	3	0.78	3	0
Hereditary telangiectasia	2	0.52	0	2
Rhinosporidiosis	2	0.52	2	0
Esthesioneuroblastoma	1	0.26	0	1
Carcinoma of nose and PNS	1	0.26	1	0
Nasopharyngeal carcinoma	3	0.78	2	1
Total	383		228	155

Epistaxis due to littles area 142 (37.071%) stood first. Second commonest cause was rhinosinusitis 108 (28.19%), Neglected hypertension 48 (12.53%) was the third reason. Trauma 35 (9.13%) and DNS 14 (3.65%), fibro angioma 13 (3.39%), foreign body nose 9(2.34%), JNA 3 (0.78%), carcinoma nasopharynx 3 (0.78%), rhinosporidiosis 2 (0.52), Hereditary telangiectasia 2 (0.52) in descending order. The least common observed pathology was Esthesioneuroblastoma (0.26%) and Carcinoma PNS 1 (0.26%).

Table 4: Site of bleed:

Site	No. of cases	(%)
Septum (ant. & post.)	182	47.5
Lateral wall	191	49.9
Floor	6	1.6
Roof	1	0.2
Nasopharynx	3	0.8

Bleeding from the septum particularly littles area, in children is the commonest identified aetiology[2]. Bleeding from the lateral wall and particularly from the posterior aspect in adults was recognized as commonest area of epistaxis [3].

Table 5: Modalities of treatment

Type of treatment	No. of cases	(%)
Conservative medical treatment	123	32.1
Local cauterization (chem. / electro)	52	13.5
Anterior nasal packing	53	13.8
Posterior nasal packing	12	3.1
Septal surgery	14	3.7
Ant.nasal packing with sinus surgery	108	28.2
Other surgical measures	17	4.4
Radiation	4	1

Out of different treatment modalities the conservative medical management in 123 patients (32.1%) was mostly used.

The second most common was the anterior nasal packing with sinus surgery in 108 patient (28.2%) anterior nasal packing in 53 (13.8%) with either cotton wick or ribbon gauze or merocele and local cauterisation with chemical or electric cautery 52 (13.5%), radiation was used in 4 cases (1%).

Discussion

Commonest cause of epistaxis evolved as the nose pricking over the little area of septum and later in rhinosinusitis. Male predominance is seen. Smoking, hypertension and alcohol consumption, common in males, so males 59.5% and females 40.5 %. Male to female ratio is 1.47:1.

Our results are almost similar to sambha Vaishnav et al study 2005 results. 57.1% (198) patients were present in age 0-10 years due to nose prick are trauma to littles area, second most common age group affected is 31 – 40 years 10.8 % (41), as it includes trauma and others. Least effected age group was 61-70 age group (1%).

Commonest cause of epistaxis in adults was hypertension and mostly seen in 4,5,6 decades of age which was similar to study done by Kalpana survey2015 [4]; in children bleeding from anterior part of septum and in adults it is from lateral wall from sphenopalatine foramen area.

Among the total patients of epistaxis, trauma to littles area 142 (37.071%) stood first. Second commonest cause was rhinosinusitis 108 (28.19%) due to increased number of patients suffering from allergy. Neglected hypertension 48 (12.53%) was the third reason. Trauma 35 (9.13%) and DNS 14 (3.65%) were less common causes which need surgery.

Later fibro angioma 13 (3.39%), foreign body nose 9(2.34%), JNA 3 (0.78%), carcinoma nasopharynx 3 (0.78%), most of the epistaxis managed primarily with conservative medical management in 123 patients (32.1%), latter was the anterior nasal packing with sinus surgery in 108 patient (28.2%) anterior nasal packing in 53 (13.8%) with either cotton wick or ribbon gauze or merocele and

cauterisation with chemical or electric cautery 52 (13.5%) which were almost equally used in the management. Rarely posterior nasal packing with regular posterior pack 12 (3.1%) was used. Epistaxis with rhinosinusitis was managed by performing FESS in 108 (28.2%) patients. Epistaxis due to DNS with spurectomy in 14 (3.7%). Nasopharyngeal carcinoma 4 (1%) by referring to radiation.

Conclusion

In my study males were affected more than females. Bleeding from littles area of septum is the commonest cause in children of 0-10 years. Second most common cause was rhinosinusitis. Later was hypertension in adults, were epistaxis arises from the lateral Wall of the nose.

Conservative medical management was the commonest mode of treatment in most cases [5]. Next was the anterior nasal packing and rarely posterior nasal packing was used. The other causes are DNS, Benign & malignant lesion was managed later with surgery and irradiation [6].

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