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Role of Nasal Endoscopy for the Evaluation of Epistaxis

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Abstract **Original Research Article**

Objective: In this study our main goal is to evaluate the role of nasal endoscopy for the evaluation of epistaxis. ***Method:*** This cross-sectional study was conducted among 50 patientswho fulfilled criteria from department of otolaryngology-Head and neck surgery, Chittagongmedical College and hospital, chattogram from January 2017 to January 2019. ***Results:*** During the study, most of the patients belong to 41-50 years age group, 36%. 10% had nasal polyp, 26% had DNS, septal spur with ulceration, and 30% had bleeding point high in lateral nasal wall crevices.38% treated with endoscopic nasal packing. Followed by 10% treated with endoscopic polypectomy, 26% treated with endoscopic nasal cautery. ***Conclusion:*** From our study we can conclude that, a nasal endoscope is the only hope to prevent trauma to the normal mucosa due to these packing materials and Instruments. Further study is needed for better outcome.

Keywords: Nasal endoscopy, epistaxis, otolaryngology.

INTRODUCTION

Epistaxis is one of the common symptoms encountered in the otolaryngology. Many times, the cause for epistaxis is not found on anterior and posterior rhinoscopy. It is a common clinical condition and not a specific disease process, but it is essentially a symptom complex. It is the most frequent emergency in Otolaryngology, presenting with a prevalence of about 10% to 12% [1-3]. Most of the time, it is able to locate the cause or the bleeding point. One of the principal reasons being the poor visualization of the covert areas of the nose, which are situated in the deep crevices of the lateral wall of the nose. Anterior and posterior rhinoscopy thus, has its limitations. In this study our main goal is to evaluate the role of nasal endoscopy for the evaluation of epistaxis [4].

OBJECTIVE

General objective

- To assess the role of nasal endoscopy for the evaluation of epistaxis.

Specific objective

- To detect abnormalities found in nasal endoscopy.
- To identify endoscopic management of epistaxis.

METHODOLOGY

Type of study	**Cross-sectionalstudy**
Place of study	Department of otolaryngology-Head and neck surgery, chittagongmedical college and hospital, chattogram.
Study period	January 2017 to January 2019.
Study population	50 patients included in the study who were fulfilled criteria.
Sampling technique	Purposive

Study procedure

During the study, face to face interview of the participants were conducted with the semi-structured, pre-tested questionnaire. The interview was conducted anonymously and privately as much as possible. Before preceding the data collection, the detail of the study was explicitly explained to each eligible respondent and informed written consent from the respondents were obtained.

Data Analysis

Descriptive statistics were presented with relative frequency and percentage.

RESULT

In table-1 shows age distribution of patients where most of the patients belong to 41-50 years age group, 18(36%). The following table is given below in detail:

Table-1: Age distribution of patients

Age group in years	Frequency	Percentage (%)
≤20	5	10
21-30	7	14
31-40	5	10
41-50	18	36
51-60	11	22
61-70	4	8
Total	50	100

In figure-1 shows distribution of patients according to the gender where (29) 58% patients were male, which was 16% higher than female (21) 42%. The following figure is given below in detail:

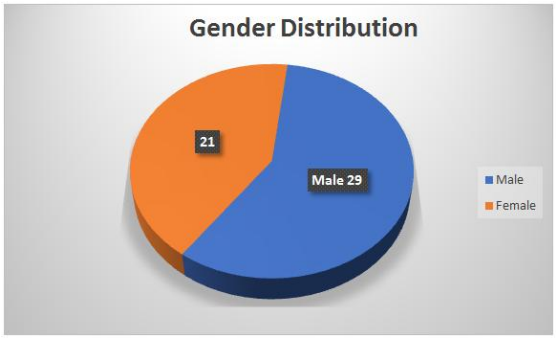

Fig-1: Distribution of patients according to the gender

In table-3 shows abnormalities found in nasal endoscopy. Where 15 (30%) has bleeding point in the crevices of lateral nasal wall followed by 13 (26%) had DNS, Septal spur with ulceration. The following table is given below in detail:

Table-3: Endoscopic diagnosis

Diagnosis	Frequency	Percentage (%)
Bleeding point in the crevices of lateral nasal	15	30
DNS, Septal spur with ulceration	13	26
Nasal Polyp	5	10
Enlarge adenoids	5	10
Scabs or crust in crevices in lateral nasal wall	6	12
Angiofibroma	2	4
No significant cause	4	8
Total	50	100

In table-4 shows endoscopic management of epistaxis. 19 (38%) treated with endoscopic nasal packing. Followed by 13 (26%) treated with endoscopic cautery or diathermy. The following table is given below in detail:

Table-4: Endoscopic management of epistaxis

Endoscopic management	Frequency	Percentage (%)
Endoscopic nasal cautery or diathermy	13	26
Endoscopic nasal packing	19	38
Endoscopic polypectomy	5	10
Adenoidectomy	5	10
Nasal douching	6	12
Excision of angiofibroma	2	4
Total	50	100

DISCUSSION

Epistaxis is one of the commonest ENTemergencies. Prevalence of the disease can be up to60% of the general population [5, 6]. Malepatients are more prone to be affected [7, 11, 12]. Which is supported by our studies where 58% patients were male and 42% were female.

Usually epistaxis is spontaneous, mild andstops spontaneously following pinching ofexternal nose (Hippocratis method), but itmay occur following nose blowing andstrenuous work. Sometimes it may beprofuse which can lead to haemodynamicunstability requiring urgent interference. Epistaxis can be divided into two types, anterior and posterior, depending upon thesource of bleeding anterior or posterior topyriform aperture. Usually, anterior epistaxisis commonly seen in young populationand posterior epistaxis is seen in oldpopulation.[9]In our study, we found that, most of the patients belong to 41-50 years age group 36%,similar findings was seen in one study[11].

In one study they found that, between 70 - 80% of all cases of epistaxisare idiopathic, spontaneous bleeds withoutany proven precipitant or casual factor. This type is called primary epistaxis.Whereas, when a clear and defined causeof epistaxis is found, then it is calledsecondary epistaxis [7].

Nasal endoscopy takes an important role inevaluating the epistaxis. It helps to revealthe hidden pathologies inside the nasalcavity that can be missed during theanterior and posterior rhinoscopy. It is notalways possible to detect the pathology ofnasal cavity by anterior and posteriorrhinoscopy. Moreover, posterior rhinoscopyis very difficult in most of the cases due toexcessive gag reflex. So, pathologies forposterior epistaxis remains undetected byconventional examination. Nasal endoscopyhelps to detect those pathologies insidenasal cavity that can be easily missed byclinical examination [10]. In our study we also identified that, 10% had nasal polyp, 26% had DNS, septal spur with ulceration, 30% had bleeding point high in lateral nasal wall crevices, similar findings was seen in one study[13]. Most of these diagnosed cases were managed successfully by endoscopic nasal packing 38%, and by endoscopic nasal cautery or diathermy 26%, similar finding was seen in one study [14].

CONCLUSION

From our study we can conclude that, a nasal endoscope is the only hope to prevent trauma to the normal mucosa due to these packing materials and Instruments. Further study is needed for better outcome.

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