



RESEARCH ARTICLE

EPISTAXIS IN CHILDHOOD – A STUDY ON THE IDIOPATHIC COMPONENT

*Raisa Priyadarshini

SCB MCH, Utkal University, India

ARTICLE INFO

Article History:

Received 27th February, 2017
Received in revised form
29th March, 2017
Accepted 07th April, 2017
Published online 31st May, 2017

Key words:

Aetiology, Children,
Epistaxis, Management.

Copyright©2017, Raisa Priyadarshini. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Citation: Raisa Priyadarshini, 2017. "Epistaxis in childhood – A study on the idiopathic component", *International Journal of Current Research*, 9, (05), 51512-51513.

ABSTRACT

Background: Epistaxis is a common innocuous event in childhood.(1)

Methods: It is a prospective observational study conducted in a tertiary care hospital. Paediatric patients (under the age of 12) presenting to the outpatient department with complaints of epistaxis were observed, treated and the follow-up data was analysed.

Results: Out of the total number (230) children males out-numbered the females. The total number of children were grouped into 2 based on the investigation and etiology. With associated cause (n=172), with no associated cause (n=58). The first group was treated in the ways befitting the disease. The other group was treated with topical saline drops, topical xylometazoline drops, oral antihistaminics and the patients were followed up. 97.6% of the patients belonging to the non-causal group did not need any other intervention and did well on follow up.

INTRODUCTION

Epistaxis is a common problem in paediatric population. It is rare in children younger than 2. Peak prevalence is in the 3-8 years age group (Murray *et al.*, 1995). Apart from other causes, environment plays an important role in epistaxis, as it is more frequent in dry environments and is often seasonal. Epistaxis of Idiopathic origin tend to be benign and is easily managed. Sometime epistaxis may herald a neoplasm (if it is unilateral and presents with other features like nasal obstruction, difficulties in vision, trismus) or it may be associated with a bleeding diathesis or the cause may be local (foreign body, trauma). The treatment of epistaxis require a systematic approach with proper investigation and the options vary according to the etiology, site and severity of the bleeding (Ciaran and Owain, 2009). We here document our study in a tertiary care hospital on epistaxis in children and particularly focus the management aspect of those with an idiopathic etiology.

METHODS

This was a prospective observational study conducted in a Medical college and Hospital in eastern India. Paediatric patients less than 12 years of age presenting with epistaxis were followed from June 2015 to December 2016. The patients were divided into 2 major groups based on the etiology identified.

*Corresponding author: Raisa Priyadarshini
SCB MCH, Utkal University, India.

Patient particulars, demographic profile, investigations done with the etiology, the management done and the follow up data were documented, tabulated and analysed.

RESULTS

Total 230 patients of less than 12 years were followed up in the study period. Males outnumbered females. Family history was found in 15% of the children. The patients with no etiology identified on investigations were branded to be suffering from Idiopathic epistaxis. For acute bleeding simple measures like pinching the nose and keeping the child's head forward is sufficient to deal with. In the Group-B(n=58), history and examination done to rule out Allergy Rhinitis, nasal obstruction, Rhinorrhea and edematous nasal mucosa. The patients were divided into 2 such groups.

DISCUSSIONS

Epistaxis is a common condition in children of meticulous search for the bleeder is an absolute necessity as a significant number can be designated as idiopathic (Watkinson, 1997). The most common cause identified as trauma or "foreign body" in the nose and this correlates with that of other studies (Murray and Milner, 1995; Ciaran and Owain, 2009). The second most cause was Idiopathic following by bleeding diathesis and Neoplasms. These patients were advised to use systemic anti-histaminics, topical decongestants and topical saline drops and were followed up at the end of 1st week, 2nd week, 1 month.

Table 1. Gender distribution of the patients

Total population	
Gender	Total Population(n) = 230
Males	148
Females	82

Table 2. Investigation protocol

Modalities of Investigation	Group-A(n=172)	Group-B(n=58)
Anterior Rhinoscopy	Foreign body, septal spur, local mucosal trauma, n=100	-
Haematological profile	Haemophilia, thrombocytopenia, haemophilia, thalassemia n=37	-
Nasal endoscopy	Haemangioma, nasal polyp, nasopharyngeal tumors, telangiectasis, prominence of blood vessels n=25	-
CECT nose and pns	Neoplasms n=10	-

Table 3. Division into two sub-groups

Associated complains	Group B1(n=8)	Group B2(n=50)
Complaining of nasal obstruction, upper airway allergy	n=6	-
Endoscopy showing edematous nasal mucosa	n=2	-
Associated with stress	-	n=14

Table 4. Follow up data

Recurrence of epistaxis	Group B1	Group B2
n=2	n=1	n=1

The seasonal variation of the nose bleeds along with its relation to stress suggests local turgence of the nasal mucosa due to reactive airway/autonomic activity and this advocates the use of topical congested oral antihistaminics and topical saline drops (as drying of the nasal mucosa due to air currents can be associated with Idiopathic epistaxis). Previously studies were conducted to devise a modality to manage idiopathic Epistaxis. The use of electric cautery, caustic agents like silver nitrate, trichloroacetic acid, petroleum jelly, oil based antiseptic cream were put forward (Ruddy *et al.*, 1999). Previous studies comparing the uses of cautery, silver nitrate, anti-septic ointment, chlorohexidine cream, petroleum jelly yielded no fruitful result (Mc Carry, ?). Other less common intervention studied were local application of tranexamic acid gel fibrin glue (Vaiman *et al.*, 2002). The management protocol were tedious and required compliance and cooperation. In our present study 25.2% of patients were identified with Idiopathic epistaxis and out of them 13.79% were associated with some form of upper airway allergy. The management did not change in either of the 2 subgroups. The patients on follow up were observed for recurrence and only 2(3.44%) patients returned with recurrence.

Conclusion

25.2% were not associated with any medical conditions. According to some Authors, Idiopathic epistaxis can improve on its own. But the simple modality of management in our study yielded good results and this can be put forward as a primary care for idiopathic epistaxis.

REFERENCES

- Ciaran, S.H., Owain, H. 2009. Update on management of epistaxis. *West London Med J.*, 1:33-41
- Mc Carry G. Nose bleeds in children clinical evidence.
- Murray, A.B., Milner, R.A. 1995. Allergy Rhinitis; A common cause of recurrent epistaxis in children. *Annals of allergy athma and Immunology*, 74:30-33
- Petruson, B. 1979. Epistaxis in childhood *Rhinology*, 17:83-90
- Ruddy, J., Nilssen E.L., Rao, S., Mcclymont, L.G. 1999. A randomized clinical trial of antiseptic nasal barrier cream and silver nitrate. *Clinical otolaryngology and allied sciences*, 24:228-31.
- Scott Brown's otolaryngology Head and Neck Surgery 7th edition.
- Tibbelin, A., Aust, R., Bende, M., Holgersson, M., Petruson, B., Rundcrantz, H. et al. 1995. Effect of local tranexamic acid gel in the treatment of epistaxis. *Journal of otorhinolaryngology*, 57:207-9.
- Vaiman, M., Segal, S., Eviatar, E. 2002. Fibrin glue treatment of epistaxis, 40:88-91
- Watkinson, J.C. 1997. Epistaxis in Scott Brown's otolaryngology 6th edition. Oxford Boston: Butterworth-Heinemann; 1-17.
