

## **A COMPARISON STUDY BETWEEN CONVENTIONAL NASAL PACKING AND MEROCIL PACKING IN THE MANAGEMENT OF EPISTAXIS**

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### **ABSTRACT**

The treatment of epistaxis has undergone significant changes in recent years. Gone are the days when patients had an uncomfortable posterior nasal pack inserted then spent several days on the ward only to bleed again on its removal? New packing devices, ingenious haemostatic agents and endoscopic surgical approaches have been developed to provide a variety of effective and well-tolerated treatment options. This paper were discussed the evolution and utility of these devices and techniques for managing difficult epistaxis patients. Modern packing devices are much easier to insert than traditional gauze packs and are no less effective. A major advance in the management of posterior epistaxis has been the development of the technique of nasal and merocil packing

**KEYWORDS:** ENT, SAS, Epistaxis, Packing

### **INTRODUCTION**

Epistaxis is a problem, which has been a part of the human experience from earliest time. The problem is extremely common and affects all age groups of both males and females. Nearly five to ten percent of the population experiences an episode of epistaxis in each year. Ten percent of those will be taking advice of physician and only one percent of the patients seeking medical health care specialists. Most of the nose bleeds stop without treatment or with no more than the treatment administered by the patients, who may compress the nose or hold his head over a basin until bleeding ceases. Most of the general population, epistaxis is a nuisance. However, the problem can be life threatening, especially in elderly patients and in those with underlying medical problems. Except in special instances, treatment of nosebleed should be regards as a surgical of Manipulative problem rather than a medical problem. To treat the nosebleed with drugs rather than by packing, caughtery or ligation is usually an error working to the detriment of the patients<sup>50,62</sup>. Due to data paucity the ENT specialist not intervned for new techniques for nosebleed in this context present study aims to compare efficacy of conventional nasal packing and merocel nasal packing in the management of epistaxis in terms of patients comfort, effectiveness at controlling the haemorrhage, ease of removal, complications associated with its use in patients attending OPD's and admitted in tertiary care Government hospitals in Bangalore city.

### **MATERIALS AND METHODS**

Patients were attending Sri Venkateshwara ENT institute, and Government tertiary health care centres of Victoria and Bowring Hospitals which are attached to BMCRI, Bangalore for the complaints of bleeding from the nose (epistaxis) from Dec 20047 TO Jul 2009 from the material source of the present study. The data were obtained and presented from the sixty cases who are presented with anterior epistaxis refractory to digital pressure or nasal cautery and were randomly divided in to two groups with 30 patients in Group- A (Conventional nasal packing) and group B (Merocel packing). The packs are made on the basis of standard protocol .The following aspects of each packs was assessed using 10cm visual

analogue scale A) Assessment by the patients; discomfort while inserting the pack, discomfort while pack was in situ and discomfort experienced during pack removal And B) Assessments by staff for bleeding occurring with pack in situ, bleeding occurring on pack removal, ease with which the pack was removed and complication associated with nasal pack. Haemostatic property of packs were measured by grading here with after removal of packs grade 0-coded as no bleeding, 1-coded as petechial bleeding, 2-coded as mild blood loss, 3-coded as gross blood loss, requires transfusion and code-4 coded debilitating blood loss, retinal or cerebral associated with fatality. Obtained score was analysed by using SAS-16.50 version, univariate analysis was employed to draw the significant inference.

## RESULTS

Total sixty known cases of epistaxis were considered, out of which 30 cases were treated by conventional Vaseline impregnated ribbon gauze packing and rest of the cases treated by merocel packing. The sides of epistaxis was documented bilateral 24(80.00%) in group A and 25(83.30%) in group B. Unilateral 6(20.0%) in group A and Group B 5(16.70%). The side of epistaxis was not found to be statistically significant ( $p>0.05$ ) with gender and groups. As per the general examination the result revealed that blood pressure with hypertension was 36.0% with episode of moderate to severe anaemia. Twenty –three had recurrent persistent bleeding for more than 3-4 months. 3.33% had systolic murmur with acute hypertension and microcytic anaemia. 63.30% of patients had grade-III haemorrhage, 36.03% had grade –II haemorrhage. The average duration required for packing was found to be  $14.0\pm 0.33$  min and  $3.50\pm 0.26$  min in group B. It was found to be both groups of packing is statistically significant with WHO grading and episode of haemorrhage. The episode of rebleeding was found to be 6.70 % in group A and 3.33% in group B. Only one patient was treated by both packing. The incidence of re-bleeding was statistically not significant between two groups of A & b ( $p>0.05$ ).

## DISCUSSIONS

The association between hypertension and epistaxis in different studies by various workers like Hallberg et al., and Hara. He revealed that no definite conclusion from the result could be arrived and not find significant correlation between the subjects with low or high blood pressure with history of epistaxis. Idiopathic is most common and it is accounted 16.67% bleeding diathesis in 10% and trauma 6.67%. Severe epistaxis refractory to digital pressure or cautery is treated by anterior nasal packing using different materials. An ideal nasal packing must be effective at stopping epistaxis, simple, and quick to insert and have minimal risk of aspiration and tissue sensitivity, contamination or infection and be easy to remove without adhering or causing undue patient discomfort. The present study we compared Vaseline impregnated gauze piece which was commonly used, with merocel packing. The mean score packing was positively correlated with conventional and merocel packing. The duration of packs was found to be rapid taking less than three minutes with merocel as compared with 14.80 minutes in conventional packing, while the packs were in situ there was not statistically significant difference in the discomfort caused by the packs. Both the packs were well tolerated although sixty percent of the patient did complain of headache. The differences in discomfort on removal of packs was found to be statistically significant ( $p<0.05$ ) which was coincide with similar study conducted by Pringle et al., Management of epistaxis is multi-dimensional and control of nasal bleed and treatment of co existence medical conditions and it should dealt concomitantly. Direct treatment requires identification of bleeding point by nasal packing and stopping the bleed. Indirect methods involve nasal packing, hot water irrigation, systemic medical therapy etc.,. If the above techniques fails surgical management is required which consist of ligation techniques, septal surgery or embolization, since we have started doing primary endoscopic control of emergency epistaxis. We have not had a single instances where splenopalative clipping was required to be done.

## CONCLUSIONS

Epistaxis is a very common ENT emergency and alarming for the patient. Epistaxis with accurate identification of bleeding point and good control by nasal packing.

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