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RESEARCH ARTICLE

USE OF MEROCEL PACKS TO MANAGE DIFFUSE EPISTAXIS IN PATIENTS WITH COMORBIDITIES

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ABSTRACT

Epistaxis is one of the most common ENT emergencies. It is more common in males than in females. It is caused by various etiological factors. The simplest treatment is pinching of ala nasi. Our study was the prospective study. We recruited 30 patients (all adults) who presented with epistaxis in ENT department of a tertiary care hospital. We managed our patients with merocel packs alone. Patients did not experience further episodes of bleeding following removal of merocel packs after 48 hours.

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INTRODUCTION

Epistaxis is one of the most common ENT emergencies. It is more common in males than in females [Pollice, 1997]. Its incidence shows a bimodal distribution, with peaks at <10 and >50 years of age. Historically, epistaxis was classified as anterior and posterior with no definite demarcating line. Different treatment options are used for epistaxis depending on the severity. In minor cases, compression of the affected nostril with cotton, direct application of pressure for 10-15 minutes and cold sponging in forehead could control the bleeding. Severe bleeding may be managed by different methods such as anterior nasal packing (Corbridge, 1995), posterior nasal packing (Holland, 2001), and chemical and electric cauterization of the bleeding point. There is a wide variety of nasal packing techniques available. The most common are Merocel packing, inflatable balloons and petroleum infused gauze. Diffuse oozing, multiple bleeding points or recurrent bleeding may indicate systemic causes, such as hypertension and coagulopathies.

Aims of Study: To study the effectiveness of merocel to manage diffuse epistaxis in patients with comorbidities

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MATERIALS AND METHODS

This study was conducted at SHKM GMC Nuh, Haryana (Tertiary Care Hospital) for a period of one year with effect from November 2017 to October 2018. Informal consent was obtained from all patients.

The Ethics of the study were reviewed and approved. We recruited 30 patients (all adults) who presented with epistaxis with comorbidities. Of the 30 patients, 24 males and 6 were females. The age of patients ranged from 21 to 84 years. The major causes of epistaxis were hypertension, cardiac disorder and coagulopathy.

Observation: All patients had experienced several episodes of nasal bleeding from both nostrils. Following nasal suction to remove blood clots, lubricated merocel packs were inserted to each nostril of all patients, followed by expansion with 5 ml of normal saline. The packs were left insitu for 48 hours. All patients received prophylactic antibiotics during treatment duration. In all cases, We removed the merocel after 48 hours. After removal of

merocel, no further bleeding was observed. All patients were followed for one month.

Patients characteristics

Patients	No of pateints
Total No. of Patients	30
Males	24
Females	6
Adults	30
Wards patients	25
Out patients	3
ICU patient	2

DISCUSSION

Epistaxis is the most common ENT emergency that requires hospital admission. Arterial epistaxis is the result of degenerative changes affecting the tunica media (O'Reilly, 1987). Shaheen suggested local ischemic changes as a potential cause of epistaxis (Shaheen, 1987). Epistaxis can be due to digital trauma, septal deviation, chemical irritants, systemic factors like coagulopathies, renal failure, alcoholism. Hypertension is a major cause for epistaxis. Anterior epistaxis is more common in adults while posterior predominates in the patients who are more than 60 year of age. There are a variety of nasal packing techniques available such as Ribbon gauze, bismuth iodine paraffin paste and balloon catheters. These techniques although effective can cause complications such as patient discomfort, infections, septal perforation, pressure necrosis of nasal alae and cardiovascular instability. Stangerup et al also used irrigation with hot water as a method of treatment for posterior epistaxis which was effective and less painful and reduced hospital stay when compared with traditional nasal packs (Stangerup, 1996). The ideal nasal pack should provide effective control of epistaxis, smooth insertion and removal, painless use, comfort in place and minimum risk of infection.

In our study bleeding was successfully controlled in 100% of the patients by using merocel packing. The rate of success was higher than that in studies by Prinjal et al. (1996) who reported success rate of 91.5 % in patients with epistaxis treatment with merocel. Merocel is a compressed, dehydrated sponge composed of hydroxylated polyvinyl Acetate. After insertion it required rehydration with normal saline to achieve its optimal size within the nasal cavity and compress the blood vessel. In addition it acts as a surface for platelet aggregation and actively encourages haemostasis. In this study, no complication were observed.

Conclusion

Epistaxis is the most common ENT emergency that require hospitalization. Our results provide evidence that it can be effectively managed with merocel in patients with comorbidities.

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