

Short Communications

Avoiding alar necrosis with post-nasal packs

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Abstract

Foley's catheter is used for post-nasal packing in severe epistaxis. Various methods have been described for securing the catheter in position, all of which can be associated with patient discomfort, risk of alar necrosis or unsightliness. We describe a new method to secure the Foley's catheter without these problems. The ribbon gauze used for anterior nasal packing is tied over the catheter in multiple knots to secure it in place. This has been successfully tried on over 50 patients.

Key words: Epistaxis; Foley Balloon Catheterization; Nasal Cavity; Surgical Procedures, Complications

Introduction

Epistaxis requiring a posterior nasal pack is a common otolaryngologic emergency. Though many treatment options are available, packing with a Foley's catheter is one of the commonly used first-line managements.¹ Other options include the use of various purpose-made balloons, such as Epistat, Brighton, Simpson and Xomed balloons, which are preferred to the traditional post-nasal pack due to the ease of use and patient comfort.¹ Foley's catheter, though not licensed for this purpose, is widely used, as it is quite effective, readily available and cost effective.²

After inflating the balloon, Foley's catheter must be pulled back and secured under mild tension with a gate

clamp or umbilical cord clamp to achieve haemostasis and avoid migration into the oropharynx; this can cause alar necrosis due to a pressure effect. The various methods described to avoid alar necrosis include the use of a gauze pack,³ eye-pad pack,⁴ cut length of plastic suction tubing,⁵ modified 1-cc syringe,⁶ and cut port of the Foley's,⁷ placed between the anterior nasal pack and the gate clamp or umbilical cord clamp. Often these remedies are unsightly and uncomfortable for the patient, and the gauze pack and eye-pad pack also run the risk of slipping from position. We describe a method of securing the Foley's catheter without using a gate clamp or umbilical cord clamp.

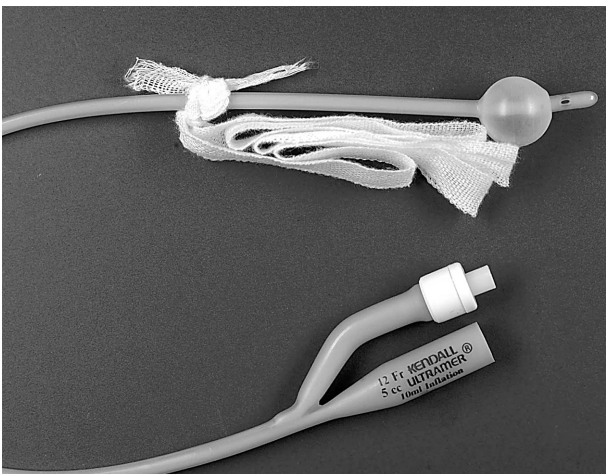


FIG. 1

Ribbon gauze tied on a Foley's catheter.

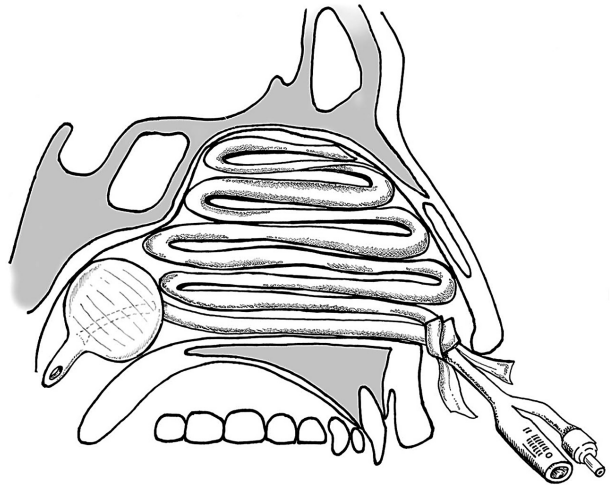


FIG. 2

Foley's catheter secured with Roman lace tie inside the nose.

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Method

The Foley's catheter is introduced and inflated with air/saline as required to control haemorrhage. It is then pulled outward under gentle tension and the nostril is packed with Vaseline/BIPP ribbon gauze (which henceforth will be referred to as ribbon).

When packing, 10–15 cm of both ends of the ribbon are left outside the nasal vestibule. After the anterior nasal packing, the two ends of the ribbon are tied over the Foley's catheter multiple times as in a Roman lace (as tied to secure a wound drain tube) (Figure 1). These multiple knots will give adequate bulk and, on releasing the pull on the catheter, will rest against the anterior nasal pack in the nasal vestibule (Figure 2). Excess ribbon ends can be trimmed off and the catheter is secured with a tape to the cheek to avoid hanging out of the nose. If the length of ribbon gauze is insufficient after anterior nasal packing, another plain ribbon gauze can be used to tie the knots on the Foley's catheter.

Even if the knots on the catheter are so tight as to completely occlude its lumen, this may be advantageous by preventing air leakage from faulty valves. In case of difficulty in deflating the balloon, the catheter tubing can be pierced with a needle.

This method will effectively achieve haemostasis, prevent the catheter from migrating into the oropharynx and allow it to remain unobtrusively in the nasal vestibule.

Summary

Post-nasal packs with Foley's catheter are used with umbilical cord/gate clamps with which there is a risk of causing alar necrosis. This method of using multiple knots to keep the catheter in position has not been previously

described; it avoids the use of the clamps, thereby avoiding the risk of necrosis and improving patient comfort.

References

- 1 Streitmann MA, Frable MAS. Soft palate perforation: a complication of posterior nasal packing. *Otolaryngol Head Neck Surg* 1996;**114**:806–7
- 2 McFerran DJ, Edmonds SE. The use of balloon catheters in the treatment of epistaxis. *J Laryngol Otol* 1993;**107**:197–200
- 3 Johnson F. Control of adenoidal haemorrhage with Foley's catheter. *Arch Otolaryngol* 1956;**63**:295
- 4 Barton CL, Ray RW. Fixation of Foley catheter against external naris. *Arch Otolaryngol* 1970;**92**:281
- 5 Nahum A. Fixation of Foley's catheter. *Arch Otolaryngol* 1972;**96**:186
- 6 Wareing MJ, Gray RF. Foley catheter fixation in posterior epistaxis. *J Laryngol Otol* 1993;**107**:1032–3
- 7 Monem SA, Mann G, Suortamo SH. A method of safely securing Foley's catheter in the management of posterior epistaxis with prevention of alar cartilage necrosis. *Auris Nasus Larynx* 2000;**27**:357–8

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