

Prevention of blood staining of endoscope tip during functional endoscopic sinus surgery: sleeve technique

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Abstract

Optimisation of the endoscopic view during FESS may require correction of a deviated septum. The resulting incision leads to bleeding which could obscure the view of the endoscope. Repeated cleaning of the endoscope intraoperatively is time consuming and traumatising of the lining of the nasal mucosa may lead to formation of adhesions post operatively.

We discuss the use a segment of suction tubing that can act as a conduit or sleeve for the passage of the endoscope into the nasal cavity. This protects the endoscope tip from the bleeding area.

Key words: Paranasal Sinuses; Endoscopy; Otorhinolaryngologic Surgical Procedures

Introduction

During functional endoscopic sinus surgery (FESS), correction of a deviated septum may be required in order to optimise the surgical view.¹ However, incision of the septal wall can lead to troublesome bleeding. The passage of an endoscope through this area may result in the endoscopic view being obscured by blood.

We present a simple technique with which to bypass such bleeding, using a 1–1.5 cm section of suction tubing as a conduit through which the endoscope is passed, thereby protecting it from the bleeding site.

Methods and materials

Firstly, a 2–2.5 cm length of 0.5 cm diameter suction tubing is cut, and this segment is introduced into the nasal vestibule (Figure 1).

This length of tubing acts as a conduit or sleeve for the passage of the endoscope into the nasal cavity, and protects the endoscope tip from the bleeding area (Figure 2).

With the suction tubing in situ, it is still possible to pass other instruments into the nasal cavity, in addition to the endoscope. These are introduced beneath the suction tubing.

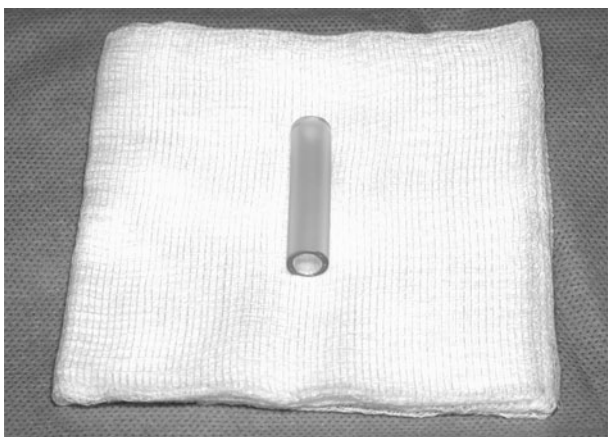


FIG. 1
Cut sleeve of suction tubing.



FIG. 2
Endoscope passed through the suction tubing sleeve.

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FIG. 3

View of the nasal cavity through the suction tubing sleeve.

Discussion

Intra-operative bleeding from the nasal mucosa can be decreased using adrenaline-soaked ribbon gauze or neuro-patties and haemostatic agents such as surgicel. In our practice, these measures are ineffective and require a period of inactivity while waiting for haemostasis. We

have found the described suction tubing sleeve technique to be a simple, safe method which saves time when managing troublesome nasal mucosal bleeding during FESS.

The sleeve technique also facilitates the teaching of juniors. This technique both enhances the surgical view (Figure 3) and bypasses bleeding from the nasal vestibule, making the procedure technically easier to perform for inexperienced operators.

Reference

- 1 Cantrell H. Limited septoplasty for endoscopic sinus surgery. *Otolaryngol Head Neck Surg* 1997;**116**:274–7

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