

CASE REPORT

Soft nasal bolster or tape nasal dressing after sinonasal surgery: The patient knows best

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Abstract

Background: Rolled up gauzes held in place under the nose with a sticky tape applied to the cheeks are routinely used immediately post-op on patients following their sinonasal surgery. Removal of the tape can be painful for patient. To avoid this, we introduced a nasal bolster made by putting a rolled up swab in an elasticated tubular bandage which is then tied at the back of the head.

Methods: A prospective patient satisfaction survey questionnaire carried out over 8 months from inpatient stay patients who underwent sinonasal surgery. A database was created to record patient demographics, type of surgery, type of bolster used, patients reported satisfaction and preference for type of nasal bolster scored on a visual analogue scale (VAS) from 1-10.

Results: A total of 130 (Male 77; age range 14-79 years) completed the questionnaires. Most common operations were FESS and septoplasty. Of the 130 patients, 100 used only the soft nasal bolster and scored it 8.5/10 on the VAS. A cohort of 30 patients used both types of bolsters and had preferred the soft bolster compared to the tape dressing (VAS 8.3 vs 3.8).

Conclusion: Our simple service evaluation study shows that non-adhesive nasal bolster is preferred following sinonasal surgery. The soft nasal bolster is easy to make at a relative small cost and is non-abrasive and painless for post-op patients. Therefore, we propose the soft nasal bolster should be more widely used in post-operative care for patient comfort.

Keywords: nasal bolster; sinonasal surgery; patient satisfaction

Introduction

Nasal bolsters are often used to control blood dripping and secretions in patients following sino-nasal surgery. (ESS, septoplasty and septorhinoplasty). One of the most commonly utilized measures is to use a rolled-up gauze held in place under the nose with a sticky tape applied to the cheeks. Repeated removal of the tape can be quite painful and uncomfortable for the patient. To avoid this, we introduced a nasal bolster made by putting a rolled-up gauze in an elasticated viscose tubular bandage which is positioned under the nose and tied at the back of the head or around the ears. This can be made up by the nursing staff in the ward and theatre as described below. Material used to make these bolsters is inexpensive and often well-stocked in hospital for orthopaedic and plastic surgery wound dressing. In order to assess which bolster is better for patient post-operatively, we have carried out a simple comparative study as part of our service evaluation project.

Materials and method

A prospective patient satisfaction survey questionnaire was carried out over 8 months. Data was collected from consecutive inpatient stay patients following nasal and sinus surgery. A secured password protected database was created to record information on patient demographics, type of surgery, type of bolster used (tubigrip or tape), patients' satisfaction and preference for type of nasal bolster scored on a visual analogue scale (VAS) from 1-10. Microsoft Excel (2013) was used for data collection and analysis. Data is presented in a descriptive and categorical manner.

Material: Four layers of non-woven 4 ply (7.5 x 7.5 cm) gauze and Elasticated viscose tubular bandage.

Method: Roll 3-4 layers of gauze into a cigar shape. Thread the rolled gauze through the tubular bandage. Cut the tubular bandage at 75-80 cm and railroad the gauze to the middle of the bandage.

Results

A total of 130 patients (male 77; mean age 43 years) completed the questionnaires. Most common operations were endoscopic sinus surgery (ESS) and septoplasty. Of the 130 patients, 100 patients had

only worn the soft nasal bolster and scored it 8.5/10 for comfort and satisfaction on the VAS. A comparative study of the two bolsters was carried out in a subsequent 30 patients whom had used both the traditional surgical taped bolster and the elasticated tubular bandage soft nasal bolster. Patients reported the soft nasal bolster to be more comfortable (VAS 8.3 vs 3.8). Twenty-eight of these patients preferred the soft nasal bolster to the taped bolster (Appendix).

Discussion

Applying nasal bolster under the nose is a common practice in the immediate post-operative care in patients following any sinonasal surgery. This is to help to collect nasal leakage so that patients will not need to wipe or dab their nose constantly. It can also be used to monitor blood loss. Traditionally, a rolled up gauze is used and this is taped on to both cheeks with a surgical tape which can be either an Elastoplast or Micropore tape. In the immediate post-operative period, the skin adjacent to the nose can be quite sensitive and swollen. Hence repeated removing and reapplication of these surgical tapes with each bolster change can be very painful and often leads to peeling of the skin. In elderly patients whereby the skin is relatively thin, this lead to abrasion or even skin loss due to its fragility. The breakdown in the natural skin barrier can lead to a source of infection. Moreover, some patients can be allergic to the surgical tape material.

There are various methods described in the literature with different materials used to construct a nasal bolster [1,2]. Nevertheless, the principle of these methods share a similar theme which is simplicity, inexpensive and ease of preparation. In the short letter by Wong *et al.* [1], they reported a positive feedback from both their nursing staffs and patients. In our survey, we find a high satisfaction score with the soft nasal bolster from our patients with nearly all patients preferring this to the taped dressing.

Conclusion

Patients tend to prefer a non-adhesive nasal bolster following sinonasal surgery. We propose the use of a soft, stretchy and adjustable nasal bolster for our rhinology patients to optimize their post-operative care.

Ethical approval: Not required as the authors had carried this out as part of their service evaluation project.

References

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2. Wong RS, Smith K, Moore A. A single-material method to create a nasal bolster. *Clin Otolaryngol*. 2014; 39: 71.

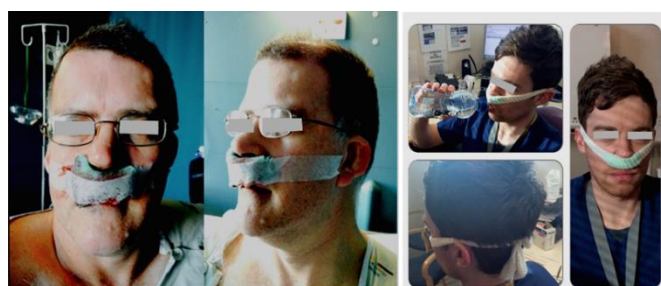
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Appendix



Traditional nasal tape dressing

Soft nasal bolster

Figure 1: Traditional nasal tape over gauze dressing versus soft nasal bolster.

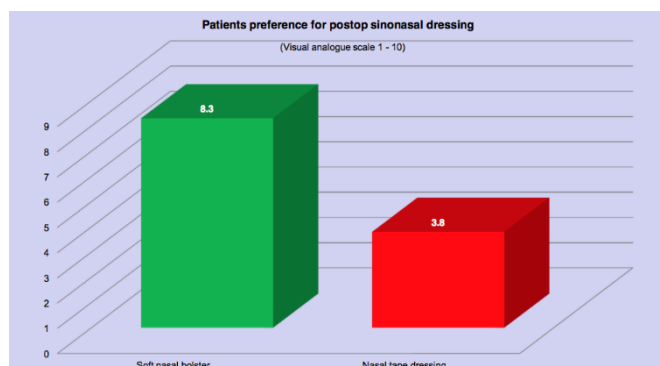


Figure 2: Patient satisfaction with visual analogue scale (VAS) 1-10 comparing soft nasal bolster and nasal tape dressing.



Figure 3: Materials used for making soft nasal bolster.



Figure 5: Theatre nurse making bolsters for use in theatres.



Figure 6: Theatre nurse making bolsters for use in recovery area



Figure 4: Two co-authors making bolsters for use in outpatient emergency clinic.



Figure 7: Soft nasal bolsters.