An Innovative Method of Packing is Superior to Conventional Method of Anterior Nasal Packing

Saroch M1*, Renot B2 and Mehra R3

1Department of Otorhinolaryngology, Associate Professor E.N.T. DRRPGMC Kangra at Tanda, Himachal Pradesh
2Junior Resident DRRPGMC Kangra at Tanda, Himachal Pradesh
3Junior Resident ENT DRRPGMC Kangra at Tanda, Himachal Pradesh

1. Abstract

Packing of nose is a very common procedure performed after sub-mucosal resection. Purpose of nasal packing is with intention of preventing post-operative complications like:

1. Bleeding
2. Septal Hematoma
3. Adhesion formation

Moreover, it was noted even after packing these complications always occur when packing was done in normal conventional way. So in our institution to minimize above mentioned complications with conventional packing we have done modified nasal packing study in 50 patients between September 2009 to February 2011. Results of study revealed that by modified packing there was significantly reduction in complications.

1.1. Introduction: In this study we want to analyses and prove that modified packing is advantageous in preventing short term as well as long term complications following SMR in septal correction surgery.

1.2. Material & Methods: One hundred patients of septal deviation dated for surgery were enrolled in a prospective randomized controlled study which compared the incidence of a variety of postoperative signs and symptoms in 17 years of age and older who did conventional packing (n=50) did modified packing(n=50) following submucosal resection at Dr. R.P. Govt. Medical College Kangra at Tanda H.P. India. (Figure 1, 2).
2. X-ray films of the sizes of 5 cm x 1 cm with pores in film
3. Chromic cat gut used (3-0) to suture two x-ray films around columella.
4. Adrenaline used in packing along with ointment.
5. Cut gloves were used for ribbon gauge packing (ribbon
gauge size 100 cm x 1 cm for each nasal cavity)

2. Observations

It was noted that even after packing these complications always
occur (bleeding, septal haematoma & adhesions) but in addition
there is more postoperative pain, headache, epiphora, dysphagia
and sleep disturbances on the night of surgery in the patients who
undertake nasal packing in conventional way. So in our institu-
tion to minimize the above mentioned complications we have done
nasal packing in a modified way—ie. folded ryle’s tube with eye
made in centre of tube after cutting (as shown in Figure-1) and
x-ray films of sizes of 1 cm x 5 cm with pores and cuts in it. (as
shown in figure-2). The study was done in 100 patients between
Aug. 2009 and Feb. 2011, in 50 patients conventional packing was
done and in another 50 patients modified packing was done.

Results of study revealed that there were significantly reductions
in postoperative complications.

Grading of complications was from +4 to – 4

Regarding bleeding - even when pack was removed, no bleeding
– 4

Septal haematoma - 4

Nasal patency for respiration + 4

Adhesion formation - 4

Headache - 2

Dysphagia – 4

Sleep disturbances on night of surgery - 4

But postoperative complications like epiphora & postoperative
pain at the time of pack removal remain the same. (Figure 3-8).
3. Discussion

The practice of nasal packing following SMR was based on a desire to prevent postoperative complications such as bleeding, septal haematoma and adhesion formation. However, it was found that conventional nasal packing is not only ineffective in preventing these complications, it actually causes these complications. So in our institution we are doing modified nasal packing. The potential complications of SMR include septal perforation; failure to completely improve breathing due to swollen membranes as is seen in allergic patients; postoperative bleeding; nasal crusting; and reobstruction due to improper healing and scarring, creating intranasal synechiae. So Dublin and Pletcher [1] stated that although it appears intuitive that conventional packing may prevent or decrease the incidence of complications following SMR, evidence supporting this assertion is limited at best. In addition, certain costly other types of nasal packing have been implicated as a causative factor of catastrophic complications, such as toxic shock. With limited evidence to suggest a beneficial effect and a potential for deleterious side-effects, the routine use of conventional post-operative packing following SMR should be questioned. Instead modified cheapest packing should be done in routine. Further Awan and Iqwal [2] conducted a prospective randomized study which compared the incidence of a variety of postoperative signs and symptoms in 88 patients, 15 years of age and older, who did (n=44) and did not (n=44) undergo nasal packing following septoplasty. Hajii onannou JK [3] has explained regarding pack removal time following septal surgery.

4. Conclusion

So during our research at Dr. R.P. Govt. Medical College Kangra at Tanda H.P. 176001 it was concluded that to reduce the postoperative complications following SMR nasal packing should be done in a modified way as discussed early. Folded Ryle’s tube maintaining airway patency should be removed on 3rd post-operative day along with pack and x-ray films should be removed on 10th post-operative day. Further it was also noticed that modified packing was very useful in old patients with COPD, hypertension and epistaxis because their respiratory effort is already compromised.

References