

CASE REPORT**FORGOTTEN POST OPERATIVE NASAL SPLINT & ORO-NASAL FISTULA****Nadeem Ahmed Sheikh, Kanwal Nadeem**

ENT Department, Combined Military Hospital, Abbottabad, Medical officer, Army Burn Hall College for Girls, Abbottabad-Pakistan

Oro-nasal fistula is an anomalous communication between the floor of nasal passage and the roof of the oral cavity. It may develop as a congenital defect e.g. cleft palate, or rarely, consequent to an operative procedure like a sub muco-perichondrial resection surgery of the nasal septum. After nasal septal corrective surgery, follow up of the patient with meticulous nasal toilet and detailed examination is mandatory. In operated patients who do not report to follow up, and later on present with persisting nasal discharge, pain, nasal blockage and exsanguination must alert a clinician for any evidence of a possibly retained foreign object. Inadvertently retained nasal splints can cause long lasting morbidity due to a possible chronic sinusitis, toxic shock syndrome and palatal perforation.

Keywords: Nasal septum; Nasal lavage; Nasal septal perforation; epistaxis; Nasal surgical procedures; Splints, Fistula

Citation: Sheikh NA, Nadeem K. Forgotten post-operative nasal splint & oro-nasal fistula. J Ayub Med Coll Abbottabad 2018;30(2):293-4.

INTRODUCTION

Nasal blockage is a prevalent symptom in adult males.^{1,2} Septal deviation is a leading structural cause of symptomatic nasal obstruction. Popularized in 20th century by Freer and Killian, septal corrective/reconstructive surgery is the mainstay to address structural nasal blockage. Intranasal splints are usually secured in such procedures to prevent hematoma and adhesion formation and to provide temporary splinting to the healing nasal septum.

CASE REPORT

A 31 years old serviceman underwent elective surgery for correction of deviated nasal septum and enlarged inferior turbinates under general anaesthetic in May 2004. Immediate post-operative recovery remained uneventful. His nasal packs were removed and he was discharged out of hospital with medication on 2nd post-operative day. Six weeks later he reported back in the ENT outpatient for persisting nasal blockage. Clinical reassessment revealed synechae in left nasal passage. He was subjected to galvanic nasal cautery under local anaesthetic and subsequent polyethylene intranasal splint was secured in the left nostril with silk 2/0 non-absorbable suture. This patient lost his follow up due to employment exigency.

He was prescribed medication to address subsequent discomfort in the left nasal passage and intermittent purulent nasal discharge. They provided short-termed relief. Postnasal discharge shortly accompanied crust formation in the nasal passage. With progressing relapse and remission, the symptoms became sporadic, concomitant with

nasal regurgitation of liquids and repeated sore throat.

Palatal perforation was noticed in 2006. Meticulous rhinoscopy disclosed a long standing missed polyethylene intranasal splint still secured to the nasal septum whose sharp inferior edge had long been irritating the floor of nasal passage enough to cause a linear cleft in the midline in the soft palate.

Subsequently, left-out splint was retrieved, palate was repaired and oro-nasal fistula was closed with mucosal advancement flaps relieving the patient of his symptoms. (Figure-1)



Figure-1: Healed palatal perforation caused by forgotten nasal splint

DISCUSSION

Septoplasty or sometimes classic SMR operation is a commonplace for form and function. Soft silicon splints, or those designed from sterile polyethylene drip bag are used to stent mucosal flaps, reducing the

risk of post-operative hematoma and adhesion formation. They sometimes abolish the need to pack the nose. Secured against septal mucosal flaps with non-absorbable sutures like 3/0 silk, they are removed commonly in office setting in 7–10 days' period. This period can extend up to 3 weeks.

Efficacy of nasal splints has frequently been analysed. There are arguments in favour and against securing nasal splints following nasal septal surgery. Splints are placed to prevent synechiae formation.^{3,4} Literature corroborates significant morbidity associated with nasal splints with no added benefit.⁵ At one hand pain and discomfort have been discernible complaints, yet, on the other, insignificant reduction in incidence of adhesion formation in those patients in whom nasal splints were placed following surgery, has been recorded.^{5,6} Ardehali and Bastaninejad did not find any significant benefit of nasal splints over septal suturing in 114 patients.

Incidence of post-operative pain, crusting, septal perforation, vestibulitis, haemorrhage and even toxic shock syndrome have been demonstrated, emphasizing on the need to cautiously individualize the patient for nasal splints placement.^{6,7} Conversely, nasal splint-related morbidity can be averted by follow-up and meticulous nasal toilet within one week of operation.^{6,7} Biodegradable synthetic polyurethane foam (NasoPore[®]) and Rapid Rhino[®] nasal packs have also been found to be superior alternatives to

conventional nasal splints.⁸ But availability and cost remain major constraints.

The benefits and morbidity of nasal splints is debatable. It is imperative to rationalize their use and selection on the basis of a better understanding of the indication, procedural technique and possible hazards associated with the operation. Patients undergoing septal corrective surgery must always be explained to undergo follow up in initial post-operative period.

REFERENCES

1. Vainio-Mattila J. Correlations of nasal symptoms and signs in random sampling study. *Acta Otolaryngol Suppl* 1974;318:1–48.
2. McCaffrey TV, Kern EB. Clinical evaluation of nasal obstruction: a study of 1,000 patients. *Arch Otolaryngol* 1979;105(9):542–5.
3. Muhammad IA, Nabil-ur Rahman. Complications of the surgery for deviated nasal septum. *J Coll Physicians Surg Pak* 2003;13(10):565–8.
4. Deniz M, Çiftçi Z, Işık A, Demirel OB, Gültekin E. The impact of different nasal packings on postoperative complications. *Am J Otolaryngol* 2014;35(5):554–7.
5. Malki D, Quine S, Pfeleiderer AG. Nasal splints, revisited. *J Laryngol Otol* 1999;113(8):725–7.
6. von Schoenberg M, Robinson P, Ryan R. The morbidity from nasal splints in 105 patients. *Clin Otolaryngol Allied Sci* 1992;17(6):528–30.
7. Al-Mazrou KA, Zakzouk SM. The impact of using intranasal splints on morbidity and prevalence of adhesions. *Saudi Med J* 2001;22(7):616–8.
8. Yilmaz MS, Guven M, Elicora SS, Kaymaz R. An evaluation of biodegradable synthetic polyurethane foam in patients following septoplasty: a prospective randomized trial. *Otolaryngol Head Neck Surg* 2013;148(1):140–4.

Received: 3 July, 2017

Revised: 14 December, 2017

Accepted: 23 December, 2017

Address for Correspondence:

Lieutenant Colonel Dr Nadeem Ahmed Sheikh, Classified ENT Specialist, Combined Military Hospital, Abbottabad-Pakistan.

Cell: +92 300 970 3507

Email: nadeem_ent75@yahoo.com