

A NEW LOOK AT THE NASAL ADHESIONS

Pages with reference to book, From 259 To 260

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ABSTRACT

Formation of nasal adhesions is a troublesome complication following nasal surgery. They are more commonly seen after combined surgical procedures on the nose, but may also appear after a single procedure. We present and discuss this problem following correction of the nasal septum through submucosal resection (S.M.R.) (JPMA40: 259, 1990).

INTRODUCTION

All rhinologists are familiar with nasal adhesions. Attempts have been made to prevent their formation by inserting post-operative intra-nasal splints. These splints were first described by Slinger and Cohen in 1955¹. Originally they were used to support the reconstructed nasal septum but later on others^{2,3} have used them following other septal procedures such as septal dermoplasty, grafting of septal perforations and to support the anterior nasal packing for controlling epistaxis. Shone and Tlegg demonstrated that only 11% of their cases developed adhesions and in their view, the possible aetiological factors were synchronous surgery on the nasal septum and the lateral wall; trauma to the nasal septum and the lateral wall due to nasal speculum or the nasal packs. Therefore they did not justify the use of splints in their cases because of the associated disadvantages such as infection, crusting and painful removal.

Campbell et al⁵, found that only 8% of their patients developed adhesions on the unsplinted side after a single procedure. Therefore these workers also did not recommend the use of splints following a single procedure at the cost of discomfort to their patients. We analyse the formation of adhesions in a single procedure of SMR in 426 cases over a period of two years (April 1988— March 1990).

PATIENTS AND METHODS

Four hundred and twenty six patients undergoing SMR over a period of two years were included in this study. Those requiring combination procedures were excluded. There were 375 males and 51 females. The age range was 15-75 with a mean age of 34 years. All patients had a pre-operative nasal packing by an under-training medical officer using a roll gauze soaked in 4% xylocaine with topical adrenaline 1:1000 in a ratio of 50:50 half an hour before surgery. Two hundred and eighty cases were operated under general anaesthesia and the remaining 146 under local anaesthesia with no intravenous supplement. Splinting was done in three hundred patients using x-ray film and silicon rubber preformed splints. The remaining 126 patients were simply packed with liquid paraffin soaked rolled gauze for 48 hours. All splints were removed after a mean of 8.5 days (range 7-10 days). All patients were seen daily, and suction clearance carried out. Patients were examined in outpatients department and the nose was checked for adhesions on the 15th day of the removal of splints. Statistical analysis was done using chi square and students 't' test.

RESULTS

Nineteen patients (4.4%) presented with adhesions out of which 13 were operated under general anaesthesia and 6 under local anaesthesia. All these patients belonged to the non-splinted group. Thirty

seven patients (12.3%) complained of slight discomfort due to splints particularly those made of the x-ray film. Majority of the patients tolerated them well enough, except in one case where there was erosion of the vestibular skin caused by the sharp edge of the x-ray splint. Seven patients (2.3%) complained of the unsightly look of the anterior ends of the splints as they were secured with stitches over the columella. Crust formation was the main problem encountered during the splinting period.

DISCUSSION

The incidence and morbidity due to the splints have been discussed in the past. They have been found to be very effective in preventing adhesion formation which are sometimes very troublesome. However, because of the very low incidence, 4.4% in our series and about 8.1% in other series⁵ after a single procedure on the nose, one must be more cautious and insert splints only in patients where surgeon strongly fears the formation of adhesions, such as in difficult cases. In our series, adhesions were more common in patients who were operated under general anaesthesia than those who received local anaesthetic. However statistically there was no significant difference ($P > 0.05$). Adhesions were more common in cases operated upon by Junior Staff members, and where nasal packs were put preoperatively by inexperienced personnel. We therefore believe that postoperative daily suction clearance for about 5-7 days should be a routine. Nasal decongestants should be routinely used and soft cotton wool packs should be inserted daily as long as the patient is in the ward. Nasal surgery should be carried out after the nose has been properly packed by an experienced person, preferably the surgeon himself, with xylocaine and adrenaline mixture to minimise the trauma to the lateral wall and septal flap and the operation should not be performed in a hurry. We believe that the use of intranasal splints is desirable but not mandatory, and that some degree of discomfort is acceptable in order to prevent formation of adhesions which spoil the whole purpose of the operation.

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REFERENCES

1. Slinger, S. and Cohen, B. M. Surgery of the difficult septum. *Arch. Otolaryngol.*, 1955; 61: 419.
2. Gilchrist, A. G. Surgery of the nasal septum and pyramid. *Laryngol. Otol.*, 1974; 88: 759.
3. Fischer, N.D., Biggers, W.P. and MacDonald, I. The bookend nasal septal splint. *Otolaryngol. Head Neck Surg.*, 1981; 89: 104.
4. Shone, G.R. and Clegg, R.T. Nasal adhesions. *Laryngol. Otol.*, 1987; 101:555.
5. Campbell, J.B., Watson, M.G. and Shenoi, P.M. The role of intranasal splints in the prevention of post-operative nasal adhesions. *Laryngol. Otol.*, 1987; 101 : 1140.