

Is Rigid Nasal Splinting Needed after Rhinoplasties? An 18-year Experience Using Surgical Tape

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The use of plaster of Paris postoperatively has been the gold standard for splinting rhinoplasties for decades. The rationale behind this is to preserve and protect the desired shape of the nasal tip and dorsum, especially during the first weeks of the recovery period.¹ More recently, several authors have proposed different alternatives for nasal splinting, to avoid the nuisance for the surgeon and the patient that implies molding and using the plaster for at least 2 weeks.² The list of suggested materials includes thermoplastic, metal, fiberglass,³ and acrylic⁴ splints, each one with its singular pros and cons.

However, after carrying out a systematic review of the published evidence in MEDLINE, using the relevant Medical Subject Headings (MESH): (“Rhinoplasty” AND “Splint”), we were not able to find any evidence supporting the use of rigid splints over nonrigid dressings. Ninety-six articles were found, and all of them were reviewed by the authors. Even though 16 publications suggested a novel strategy for nasal splinting, there were no trials comparing rigid nasal splinting versus nonrigid dressings of any type.

The first author of this communication was originally trained to use plasters after rhinoplasties, but since 1998, he has been using surgical tape (Micropore Surgical Tape, 3M, St. Paul, Minn.) for protecting and concealing the nasal area. The technique involves placing consecutive layers of 0.5-inch light-brown strips in a parallel, oblique, and longitudinal direction to secure the tip of the nose (Figs. 1, 2). All the strips were routinely removed after 1 week and replaced by a single transverse layer for another week in most patients. In specific cases with persisting postoperative swelling, taping was indicated for another 2 weeks.

In the last 18 years, 2,033 patients have been treated with this technique after undergoing open rhinoplasties

performed by the first author. A retrospective analysis of complications and revision rates showed no changes before and after this change was implemented. In this period, 72 (3.54%) underwent a surgical revision for patient dissatisfaction with the cosmetic outcome (Table 1).

Our case series supports the idea that rigid splinting with a plaster or any other material should not be mandatory after a rhinoplasty. Surgical tape is safe, widely available, inexpensive, easy to apply and to remove, and has the benefit of reducing the edema and ecchymosis in the areas covered by it.⁵ It also has a double effect in patients: it reminds them that they had an operation and that they should look after their noses, but also conceals the cosmetic appearance of it for at least 2 weeks in which usually it is unpleasant.



Fig. 1. Immediate postoperative result after an open rhinoplasty.



Fig. 2. Application of surgical tape for nonrigid splinting after a rhinoplasty.

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Table 1. Complication and Revision Rates for the Reported 2033 Patients Case Series

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Female		1809 (88.9%)
Associated operations		529 (26%)
	Mentoplasty	285 (14%)
	Septoplasty	145 (7.1%)
	Facial fat grafting	69 (3.39%)
Complications		
	Chronic rhinitis	28 (1.37%)
	Considerable lateralization	22 (1.08%)
	Severe bleeding	12 (0.59%)
	Wound infection	4 (0.19%)
	Nasal obstruction	3 (0.14%)
Patient dissatisfaction that required revision		72 (3.54%)

SUMMARY

Even though the postoperative use of a plaster of Paris for splinting rhinoplasties has been a widespread practice, there is little evidence supporting its use. For 18 years, the senior author has been using surgical tape after rhinoplasties for this purpose, in 2,033 patients so far. This has shown to be an inexpensive, widely available, and reliable method, easier to apply and more comfortable than a traditional plaster.

DISCLOSURE

The authors have no financial interest to declare in relation to the content of this article. The Article Processing Charge was paid for by the authors.

REFERENCES

1. Kankaya Y, Oruç M, Gürsoy K, et al. Nasal splinting: a plaster modification. *Aesthetic Plast Surg.* 2014;38:825–826.
2. Persichetti P, Simone P, Tenna S, et al. How to prevent complications during the application of nasal plaster (the spider maneuver). *Plast Reconstr Surg.* 2004;113:1891.
3. Ahn MS, Maas CS, Monhian N. A novel, conformable, rapidly setting nasal splint material: results of a prospective study. *Arch Facial Plast Surg.* 2003;5:189–192.
4. Shetty V, Vasishtha SM. Use of acrylic splint for the stabilization of bony components after rhinoplasty: a new technique. *J Maxillofac Oral Surg.* 2013;12:348–350.
5. Farahvash MR, Khorasani G, Mahdiani Y, et al. The effect of steri-strip dressing on patients' satisfaction and reduction of ecchymosis in lower eyelid, malar and cheek following rhinoplasty. *World J Plast Surg.* 2016;5:51–57.