Original Research Article

Our experience of septoplasty with resorbable nasal dressing

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Abstract

Background: Septoplasty is one of the most performed interventions in otorhinolaryngology; the main cause of discomfort for patients is the nasal dressing and the pain associated with its removal. **Material and method:** We performed 70 septoplasty operations in the period from 1 January 2018 to 21 November 2018.**Results:** Spongostan® swabs were generally removed by the patient with postoperative washes and sprays an blowing the nose. In some cases the Spongostan residues were removed by aspiration to the first control seven days after the operation. There were no postoperative bleedings, there were no cases of septal sinechisms or perforations and the patient's gradation was very high, especially considering that no postoperative painful maneuver was necessary. **Conclusions:** In our experience it turns out to be a valid alternative to all the other types of nasal pads used so far.

Key Word: Septoplasty, nasal dressing, Spongostan®,

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INTRODUCTION

Septoplasty is one of the most performed interventions in otorhinolaryngology; the main cause of discomfort for patients is the nasal dressing and the pain associated with its removal. The use of resorbable nasal dressing can be important in improving the compliance of patients undergoing septoplasty. The aim of this work is to evaluate the efficacy, safety and reliability of Spongostan® nasal dressing in septoplasty.

MATERIALS AND METHODS

We performed 70 septoplasty operations in the period from 1 January 2018 to 21 November 2018. The surgical technique respects the classical times of septoplasty[1,2,3,4,5,6] modified according to our surgical habits: Packing of nasal cavities with cotton soaked with a mixture of xilocaine 10% and epinephrine for two minutes Hemitrans fixed columellar incision, generally in the right side, to arrive to a subpericondral plane exposing the inferioredge of quadrangular cartilage Subpericondral dissection from initial incision until the entire nasal septumis dissected from mucopericondirium both in the right side and in the left side; this phase is normally performed with a suction dissector type Macca Inferiorcondrotomy, usually performed using Fomonscissors; sometimes we realize multiple incisions in the quadrangularcartilage to break-out power-lines in the septal cartilage, according with Goldman. We called this surgical phase " Carfi' s manouvre" Removal of bone spur and cartelagineousde formities using chisels and Jansen-Middle tonrongeur. Reposition of remoulded septal fragments and mucopericondral flaps Suture of the two edges of columella arincision with resorbable ematerial(Vicryl

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Rapide) Endoscoping inspection of nasal cavities to control the good functionalresult and the absence of bleeding; a rapidmoviment of a Fraziersuction tube n.3 in both nasal cavities until nasopharynx, allows to clean the nasalcavities from residualblood and to control their perviousness; this phase is playfully called "Asprea's manouvre" by our operating room nurses. Nasal packing with Spongostan® resorbabletampons7x5x1 cm. folded on themselves to form a flattening cylinder to be introduced into the nasal fossa with a nasal forceps. Spongostan® swabs were generally removed by the patient with postoperative washes and sprays and blowing the nose. The residues were removed by aspiration to the first control seven days after the operation. There were no postoperative bleedings, there were no cases of septal sinechisms or perforations and the patient's gradation was very high, especially considering that no postoperative painful maneuver was necessary.

DISCUSSION

Spongostan® is a sterile, resorbable, hemostatic gel sponge for local use, consisting of 100% porcine jelly [6,7]. Spongostan® gelatin sponge has a porous structure that does not flake when immersed in physiological solution. The gelatin sponge is absorbed over 4-6 weeks. When applied on cutaneous wounds, or on the mucosa, the sponge dissolves after about 2-5 days. Spongostan® has an absorbing capacity corresponding to about 45 times its own weight, has a neutral pH, does not irritate the tissues. Spongostan® can be cut to the desired size. Indicated in surgical procedures to facilitate the control of capillary, venous and arteriolar haemorrhage, in cases where ligation or other conventional control methods prove to be impractical or ineffective and when the use of non-resorbable material is discouraged. The time to reach the hemostasis is 5-10 Minutes. Thanks to the uniform porosity of the material, the platelets are captured, the coagulation cascade is activated and the soluble fibrinogen is transformed into an insoluble fibrin network that stops bleeding[8,9,10].

CONCLUSIONS

If the surgical procedure of the septoplasty is conducted correctly both from the surgical point of view and from the anesthetic point of view with the help of controlled hypotension, the intraoperative and postoperative bleeding is minimal. A clogged tamponade of the nasal cavities is not necessary and, in addition to being unwelcome to the patient, causes ischemia of the nasal tissues increasing the risk of septal perforations, postoperative infections and synechia. The use of Spongostan® dressing soaked in tranexamic acid solution allows a good control of bleeding by eliminating the hassle of tampons removal so feared by patients. In our experience it turns out to be a valid alternative to all the other types of nasal pads used so far.

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