Use of fibrin glue as a hemostatic in endoscopic sinus surgery.

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Abstract:

Endoscopic sinus surgery (ESS), especially when combined with turbinectomy and/or with

submucous resection of the septum, may involve postoperative bleeding that might end with nasal

packing. Nasal packing causes pain, rhinorrhea, and inconvenience and may not stop the

postoperative bleeding. The aim of our study was to compare the hemostatic properties of the

second-generation surgical sealant Quixil (Crosseal) with those of nasal packing in ESS. We

performed a prospective randomized trial in 64 consecutive patients who underwent ESS and

presented excessive intraoperative and/or postoperative bleeding. They were allocated by the

sealed-envelope method into two groups. A routine ESS procedure was ended with Merocel nasal

packing in group 1, and with aerosol application of Quixil sealant at the operative site in group 2.

The hemostatic effects were evaluated objectively in the clinic by anterior rhinoscopy and

endoscopy and assessed subjectively by the patients at follow-up visits. In group 1, various types of

postoperative bleeding occurred in 25% of patients. In group 2 there was no postoperative bleeding,

except for 1 case of late hemorrhage (3.12%). Drainage and ventilation of the paranasal sinuses

were not impaired. There were no allergic reactions to the glue. We conclude that aerosol

application of fibrin glue can be readily performed in ESS, requires no special treatment (antibiotics),

and appears to have an adequate hemostatic effect. The use of this second-generation glue in ESS

appears to stop nasal bleeding well and to be relatively safe and convenient.