Fibrin sealant: Alternative to nasal packing in endonasal operations. A prospective randomized study.

Authors: Vaiman M., Sarfaty S., Shlamkovich N., Segal S., Eviatar E.

Publication Date: 2005

Abstract:

Objectives: Endonasal operations such as septoplasty, rhinoplasty, nasal septal reconstruction and conchotomy, as well as endoscopic sinus surgery, especially when combined with turbinectomy and/or submucous resection of the septum, may produce bleeding and postoperative hematoma requiring postoperative hemostatic measures. Since nasal packing may cause pain, rhinorrhea and inconvenience, a more effective and less uncomfortable hemostatic technique is needed. Objectives: To compare the hemostatic efficacy of the second-generation surgical sealant (QuixilTM in Europe and Israel, CrosseaITM in the USA) to that of nasal packing in endonasal surgery. Methods: We conducted a prospective randomized trial that included 494 patients (selected from 529 using exclusion and inclusion criteria and completed follow-up) undergoing the above-mentioned endonasal procedures. Patients were assigned to one of three surgical groups: septoplasty + conchotomy + nasal packing or fibrin sealant (Group 1); ESS + nasal packing or fibrin sealant (Group 2); and ESS + septoplasty + conchotomy + nasal packing or fibrin sealant (Group 3). The hemostatic effects were evaluated objectively in the clinic by anterior rhinoscopy and endoscopy and assessed subjectively by the patients at follow-up visits. Results: Postoperative hemorrhage occurred in 22,9-25% of patients with nasal packing vs. 3.12-4.65% in the fibrin sealant groups (late hemorrhage only). Drainage and ventilation of the paranasal sinuses, which are impaired in all cases of packing, remained normal in the fibrin sealant group. There were no allergic reactions to the sealant. Conclusions: Our results show that fibrin sealant by aerosol spray in endonasal surgery is more effective and convenient than nasal packing. It requires no special

treatment, e.g., antibiotics, which are usually used if nasal packing is involved.