

Hemostatic glues in tonsillectomy: A systematic review.

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Abstract:

Objectives/Hypothesis The aim of this study was to compare use of hemostatic glues to conventional techniques of intraoperative hemostasis for tonsillectomy. **Study Design** A systematic review of the literature and meta-analysis. **Methods** All published prospective controlled trials that compared hemostatic glues to conventional techniques of hemostasis were identified. We performed a meta-analysis of articles comparing fibrin sealant to electrocautery, and of those comparing electrocautery to electrocautery plus fibrin hemostasis. **Results** Seven studies were identified that made qualifications for review, with a total of 748 patients. Outcome measures were postoperative hemorrhage recorded by investigators, and visual analogue scores of pain for day 1, day 3, and day 10 postoperatively. Use of fibrin sealant was not associated with a reduction in hemorrhage rates following tonsillectomy when compared to electrocautery (pooled relative risk [RR] 0.315; 95% confidence intervals [CI]: 0.047-2.093, 224 patients). No statistical difference in bleeding rate was seen between electrocautery hemostasis alone, compared to electrocautery with fibrin sealant (pooled RR 1.742; 95% CI: 0.433-7.005, 108 patients). No statistically significant difference in pain was identified. **Conclusions** Pain and bleeding are significant causes of morbidity post-tonsillectomy. We conclude that there is no significant evidence to support hemostatic glues over current techniques for reducing severity of these outcomes. Consequently, we do not recommend hemostatic glues for routine use in current clinical practice. Studies were generally of low quality and inadequately powered to detect a statistical difference, even when pooled. We advocate further research to facilitate future meta-analysis.

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