

# **A prospective randomized double-blind trial of fibrin glue for pain and bleeding after tonsillectomy.**

Authors: Stoeckli SJ, Moe KS, Huber A, Schmid S

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## **Abstract:**

**OBJECTIVES:** The notable morbidity of tonsillectomy includes considerable postoperative pain and a rate of postoperative bleeding that have remained largely uninfluenced by modern surgical techniques or medication. Fibrin glue is known to have a hemostatic effect in some settings, and there is research suggesting it may also reduce postoperative pain. The objectives of this study were to evaluate the effect of fibrin glue on pain and bleeding after tonsillectomy.

**STUDY DESIGN:** A prospective randomized double-blind study was performed on 50 consecutive adult patients undergoing tonsillectomy for chronic tonsillitis.

**METHODS:** After removal of both tonsils the tonsillar fossa randomly assigned to the treatment protocol was coated with fibrin glue. The other side was left unaltered. The patient was then monitored for postoperative bleeding and wound healing, and a patient-based pain assessment instrument was used to evaluate symptoms every 8 hours for 10 days after surgery.

**RESULTS:** Detailed evaluation of the pain scores allowed the authors to create a pain profile for what the typical patient experiences over the first 10 postoperative days, as well as during the course of a single day. The pain remains relatively constant for the first 7 days and begins to decrease only on the eighth postoperative day. During a single day there is increased pain in the morning compared with noon and evening. However, no statistically significant difference was

detected in postoperative pain, bleeding, or healing between the wounds treated with fibrin glue and controls.

**CONCLUSIONS:** The patient-based pain evaluation data should aid the physician in preoperative outcome counselling and targeted prescription of pain medication. However, contrary to previous indications, the authors cannot substantiate a significant beneficial effect of fibrin glue in postoperative pain control. Furthermore, we did not find its action as a hemostatic agent clinically applicable in this setting, and thus find no indication for the routine use of fibrin glue in tonsillectomy.