Effect of modern fibrin glue on bleeding after tonsillectomy and adenoidectomy.

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Abstract:

We performed a prospective randomized study in 179 patients to examine the second-generation surgical fibrin sealant Quixil as an effective substitute for different types of electrocautery in tonsillectomy and adenoidectomy. We compared the rates of hemorrhagic complications in a group with bipolar or needle point electrocautery and in a group in whom fibrin glue was used to stop intraoperative bleeding and to prevent postoperative bleeding. The operations were performed under general anesthesia in typical fashion with sharp dissection. For the control group, hemostasis was achieved by bipolar or needle point electrocautery. For the fibrin glue group, hemostasis was achieved by spraying Quixil fibrin glue approximately 0.5 mL to each tonsillar fossa and 0.5 mL to the nasopharynx (in adenoidectomy). The results were excellent in all the patients of the fibrin glue group, with complete hemostasis and resolution of the major symptoms. In this group, the intraoperative blood loss averaged 15 mL in tonsillectomy and 9 mL in adenoidectomy. There were no cases of postoperative hemorrhage or any other complications. The electrocautery group required a longer time for healing, and its intraoperative blood loss (tonsillectomy) averaged 29 to 33 mL. The incidence of posttonsillectomy bleeding in this group was 4.35% (4 patients). Three patients (3.26%) had primary hemorrhage (bleeding that occurs within the first 24 hours of surgery), and 1 patient (1.09%) had secondary hemorrhage (bleeding that occurs after the first 24 hours). We conclude that Quixil fibrin glue application to the operative sites in tonsillectomy and adenoidectomy provides effective hemostasis and sealing with good systemic and local compatibility. With the help of Quixil, we minimized surgical trauma and achieved absolute hemostasis at the same time. We

found this fibrin glue to be a more convenient and effective hemostatic sealant than bipolar or needle point coagulation.