Tisseel and its effects on wound drainage post-thyroidectomy:

prospective, randomized, blinded, controlled study.

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Abstract:

OBJECTIVE: This randomized, blinded, controlled study examines the effects of fibrin sealant

(Tisseel, Laboratoire de production Baxter AG, Vienna, Austria) on wound drainage following

thyroidectomy.

METHODS: Fifty-six consecutive patients were enrolled in the study. Patients were randomized into

Tisseel and non-Tisseel treatment groups. Wound drain output was tallied in 8-hour increments by

observers blinded to the treatment groups.

RESULTS: Fifty-six patients completed the study. Significant decreases in wound drainage were

found in the first 8 hours in the Tisseel group. Eight hours postoperatively, wound output in the

Tisseel group was reduced by 44% compared with the non-Tisseel group. A significant decrease in

the total drainage over the 64-hour time period of 43% was noted between the treatment and control

groups. Post-thyroidectomy wound drainage was reduced and trended to earlier drain removal. No

significant changes in the length of hospital stay were noted, nor were postoperative complications

encountered in either treatment group.

CONCLUSIONS: Fibrin sealants offer a unique opportunity to safely decrease post-thyroidectomy

wound drainage. This investigation furthers the evidence that fibrin sealants could safely enable the

implementation of drain-free thyroidectomies.