Initial experience with hemostatic fibrin glue as adjuvant during tubeless percutaneous nephrolithotomy.

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Abstract:

PURPOSE: To report our initial experience with hemostatic fibrin glue as an adjuvant during tubeless percutaneous nephrolithotomy (PCNL).

PATIENTS AND METHODS: Seventeen consecutive patients underwent tubeless PCNL with injection of 2 mL of Tisseel Vapor Heated Sealant (Baxter AG, Vienna, Austria) into the percutaneous tracts at the conclusion of the procedure. The perioperative outcomes of these patients were compared retrospectively with those of a control group of 25 consecutive patients who underwent tubeless PCNL without the use of fibrin glue. The safety and efficacy of the new approach was evaluated by comparing operative time, hemoglobin drop, transfusion requirement, length of hospitalization, postoperative pain, analgesic use, and postoperative complications in the two groups.

RESULTS: There was no difference in the mean drop in hemoglobin, transfusion requirement, or complications in the two groups. However, patients undergoing Tisseel tubeless PCNL required less analgesia postoperatively (P=0.05), and they were discharged an average of 7 hours earlier than the patients in the control group. There were no major postoperative complications.

CONCLUSIONS: Use of fibrin glue was safe and was associated with less analgesic requirement and a shorter hospital stay. Randomized studies are needed to evaluate its clinical role in the future.