## Operative and Perioperative Bleeding Risk in Femoral Neck Fracture Fixation Among Patients on NOAC Therapy: A Prospective Cohort Study

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INTRODUCTION: Femoral neck fractures are common in the elderly and require prompt surgical management. For patients on non-vitamin K oral anticoagulants (NOACs), surgery is often delayed 24–48 hours to mitigate bleeding risks. However, emerging evidence questions the necessity of this delay. This prospective aims to question whether delaying surgery for patients on NOACs is truly necessary.

METHODS:

This ongoing single-center, prospective, double-cohort study includes patients undergoing internal fixation for proximal femoral fractures. Patients on NOACs are compared to non-anticoagulated controls matched by fracture type and operating surgeon. Data collected include early intraoperative NOAC levels, intraoperative blood loss, perioperative hemoglobin trends, transfusion requirements, operative duration, and surgeon experience. Patients are monitored for 30-day complications and followed for up to one year postoperatively.

RESULTS: In our cohort, 26 patients on NOAC therapy and 26 control patients have been enrolled. Median intraoperative blood loss in the NOAC group was 75 mL, with an average pre-incision NOAC level of 74.6 ng/mL. Median operative time was slightly longer in the NOAC group (41 vs. 33 minutes). Preoperative hemoglobin levels were similar between groups (12.3 vs. 12.1 g/dL), with comparable postoperative declines and a median of 0.5 units transfused in both cohorts.

DISCUSSION AND CONCLUSION: Internal fixation for femoral neck fractures in patients on NOACs appears to be safe, with low intraoperative blood loss and minimal transfusion requirements. These findings support reconsideration of delaying surgery in this patient population and suggest that timely operative intervention may be safely undertaken without full anticoagulant reversal or delaying surgery.