Systemic administration of tranexamic acid after zone II flexor tendon repair: Does it reduce postoperative interphalangeal joints stiffness?

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INTRODUCTION: The study aims to investigate the role of systemic administration of tranexamic acid in reducing the interphalangeal joints stiffness after repair of zone II flexor tendons of the hand.

METHODS: A quasi experimental study was conducted including 120 patients with 134 zone II digital flexor tendon lacerations. All patients underwent tendon repair and were assigned to one of two groups. In the tranexamic acid (TXA) group (61 patients; 66 flexor tendon laceration), an intravenous bolus of one gram of TXA was administered before skin incision. In the control group (59 patients; 66 flexor tendon laceration), an IV bolus of 10 mL normal saline was administered before skin incision. All patients were evaluated for intraoperative blood loss, presence of postoperative hematoma, degree of edema, total active motion (TAM) of the fingers, grip strength and complications rate.

RESULTS: Mean intra-operative blood loss and degree of edema were significantly less in the TXA group. Better TAM was achieved in the TXA patients. Grip strength was similar in both groups at final follow-up. Fewer complications occurred in the TXA group.

DISCUSSION AND CONCLUSION: Intravenous TXA could be used safely and reliably while repairing zone II flexor tendons of the hand. In addition, it might help improve the TAM and reduce joints stiffness of the fingers.