Topical Tranexamic Acid Does Not Reduce The Incidence Of Hematoma In Reduction Mammoplasty: A Double-Blinded, Randomized Controlled Trial

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Background
Postoperative hematoma is one of the most common complications following reduction mammoplasty. Tranexamic acid (TXA) has been shown to reduce perioperative bleeding and need for transfusion when administered intravenously or topically. However, TXA remains underutilized in plastic surgery, and there is a paucity of adequately powered, randomized studies of its efficacy. The authors sought to investigate whether topical administration of TXA reduces postoperative bleeding and hematoma following reduction mammoplasty.

Methods
This was a double-blinded, randomized controlled trial of 98 patients (196 breasts) undergoing bilateral primary reduction mammoplasty at a single academic institution. One breast was randomized to receive 1000mg of topical TXA before closure, and the other received a placebo (saline). Drains were used in all patients. Incidence of hematoma within 30 days of surgery was recorded, as well as drain outputs, duration of drain use, and postoperative complications including seroma, wound healing issues, and infection.

Results
The overall hematoma rate was 1.5%. Two breasts that received TXA developed a hematoma, and

one hematoma occurred in a breast that received the placebo. There was no significant difference in drain output from TXA-treated breasts compared to controls (37.7cc versus 42.2cc, p=0.467). The hematoma rate of patients enrolled in the trial was similar to the overall rate of hematoma during the study time period (1.5% versus 2.4%, p=0.511). No adverse effects or thromboembolic events related to TXA were observed.

Conclusion:
Topical application of TXA does not appear to decrease the incidence of hematoma following reduction mammoplasty.

Tracks:

Clinical