

The Use of Tranexamic Acid in Rhytidectomy Patients

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Sir:

Hematoma formation is one of the most common complications in rhytidectomy surgery. Surgeons employ strict postoperative blood pressure protocols and special wraps and drains to try to prevent hematomas from developing and causing skin necrosis. Despite these efforts, hematoma rates range from 1% to 15%.^{1,2}

Tranexamic acid (TXA) is a fibrinolytic inhibitor developed in the 1960s and is primarily used in orthopedic joint surgery to reduce blood loss.^{3,4} In fact, it was an orthopedic surgeon who introduced us to TXA when he was undergoing a facelift and requested that we use TXA during the procedure. After observing his postoperative course, where he had not only no hematoma but also less edema and ecchymosis than expected, we began using TXA in all of our patients undergoing facelift. We would like to share our experience in using TXA in rhytidectomy patients and the effect on bleeding complications.

We performed a review of all face and neck lift procedures that were performed using TXA from November 2012 to May 2015. Patient demographics and bleeding-related complications were analyzed.

All patients underwent a full face and neck rhytidectomy with extensive dissection and superficial

musculoaponeurotic system (SMAS) plication. After the SMAS plication was performed and hemostasis obtained using bipolar cautery, TXA-soaked pledgets were placed under the skin flap while the contralateral rhytidectomy flaps were being raised. This was repeated on the contralateral side while the initial side was closed. A 10F Blake drain was placed under each flap and removed on the first postoperative day. A compressive facelift dressing was placed postoperatively and maintained for 5 to 7 days.

We identified 57 patients who underwent rhytidectomy during the study period. The average age was 61.9 years (range, 40–78 years). There were 47 women and 10 men. There was 1 (1.7%) hematoma that required evacuation. There were no major episodes of skin necrosis, infection, or facial nerve injuries. There were no venous thromboembolic events or other systemic complications related to the use of TXA. The financial cost of TXA is \$41 per patient.

These results are encouraging and show that TXA is a safe and effective means to help minimize hematoma-related complications in rhytidectomy procedures. Reducing the disruption of small-vessel clot should decrease bleeding and hematoma formation and lead to less inflammation. Although TXA is not the holy grail of hematoma prevention, it does seem to help and can be added to most regimens without significant effort. TXA has been discussed only in the plastic surgery literature related to burn and cranial vault surgery. It may be time to investigate its other potential uses. With its low cost and positive safety profile, there are few downsides. We will certainly continue to use it because we subjectively find that it has other benefits as our patients have had less edema, ecchymosis, and faster return to social activity.

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DISCLOSURE

This study was conducted in conformity to the Helsinki Declaration. The authors have no financial interest to declare in relation to the content of this article. The Article Processing Charge was paid for by the authors.

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