

Efficacy of Topical Tranexamic Acid in Gender-Affirming Mastectomy

Israel Falade¹, B.S., Alexandra Lopes¹, B.A., Siyou Song², M.D., Esther Kim², M.D.

1. School of Medicine, University of California San Francisco, San Francisco, CA, USA

2. Division of Plastic and Reconstructive Surgery, Department of Surgery, University of California San Francisco, San Francisco, CA, USA

Background

- Bleeding complications, such as hematoma, are the **most common indication** for return to the operating room in the early postoperative period
- TXA, an **antifibrinolytic** medication, has gained popularity in breast procedures
- We explored the efficacy of topical TXA in reducing bleeding complications for patients undergoing GAM

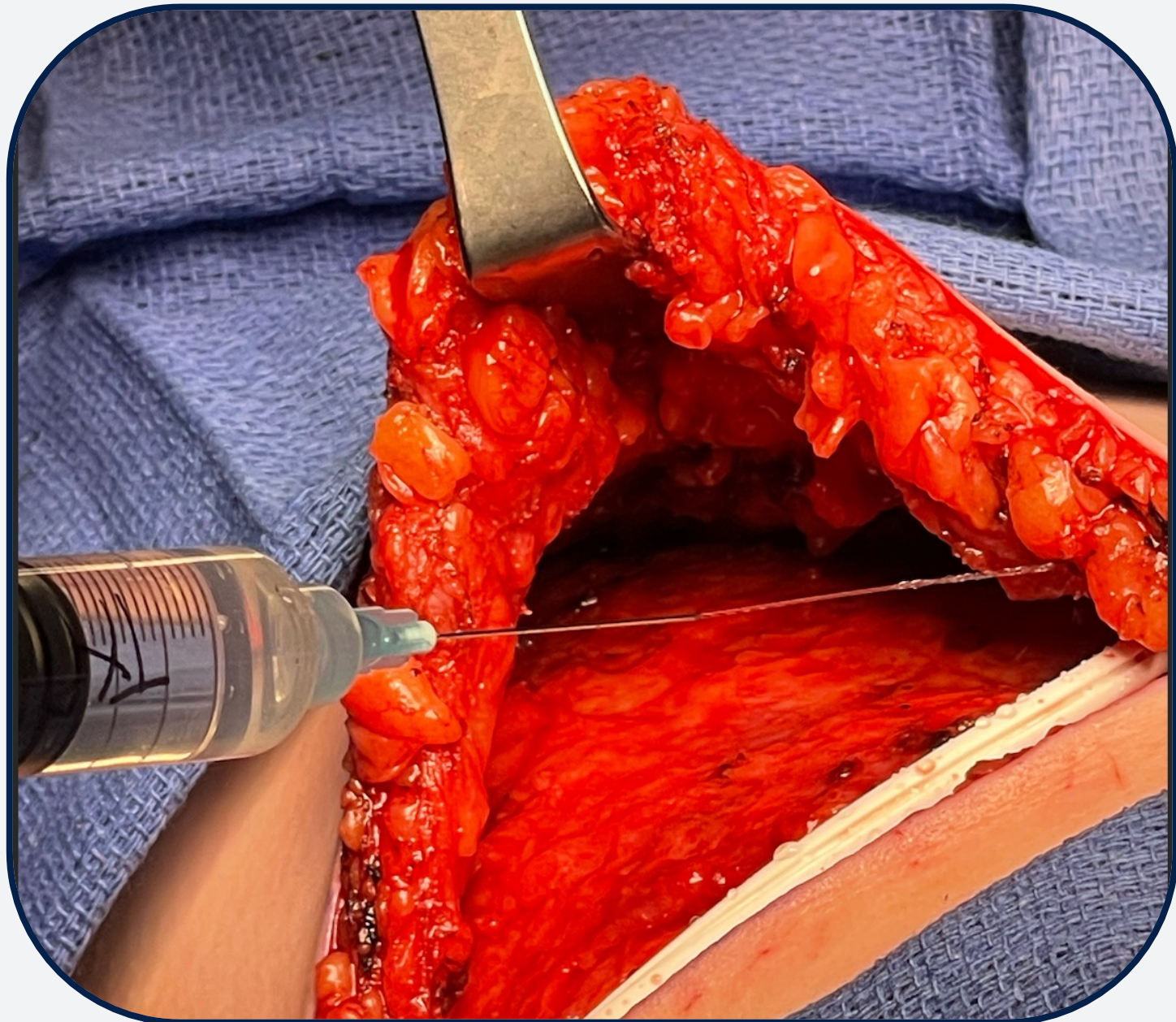
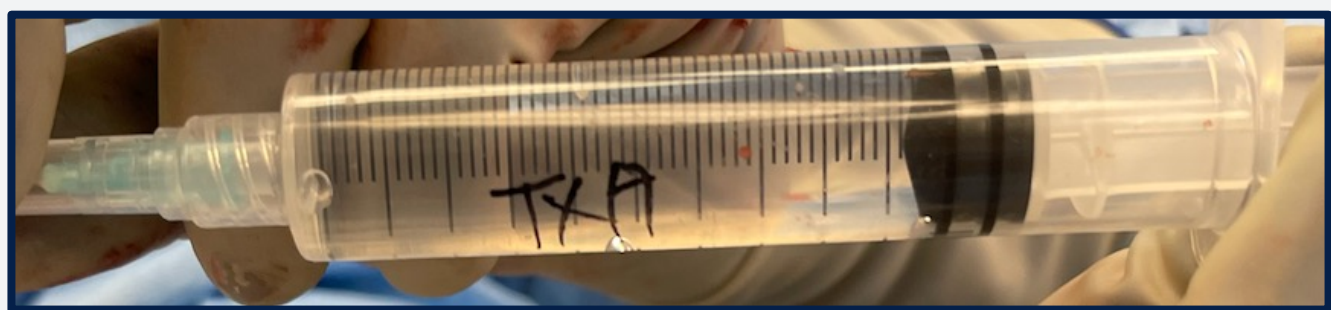
Methods

Study Design

- Retrospective review & analysis
- Topical TXA vs Control (standard hemostatic strategies)

Application of TXA

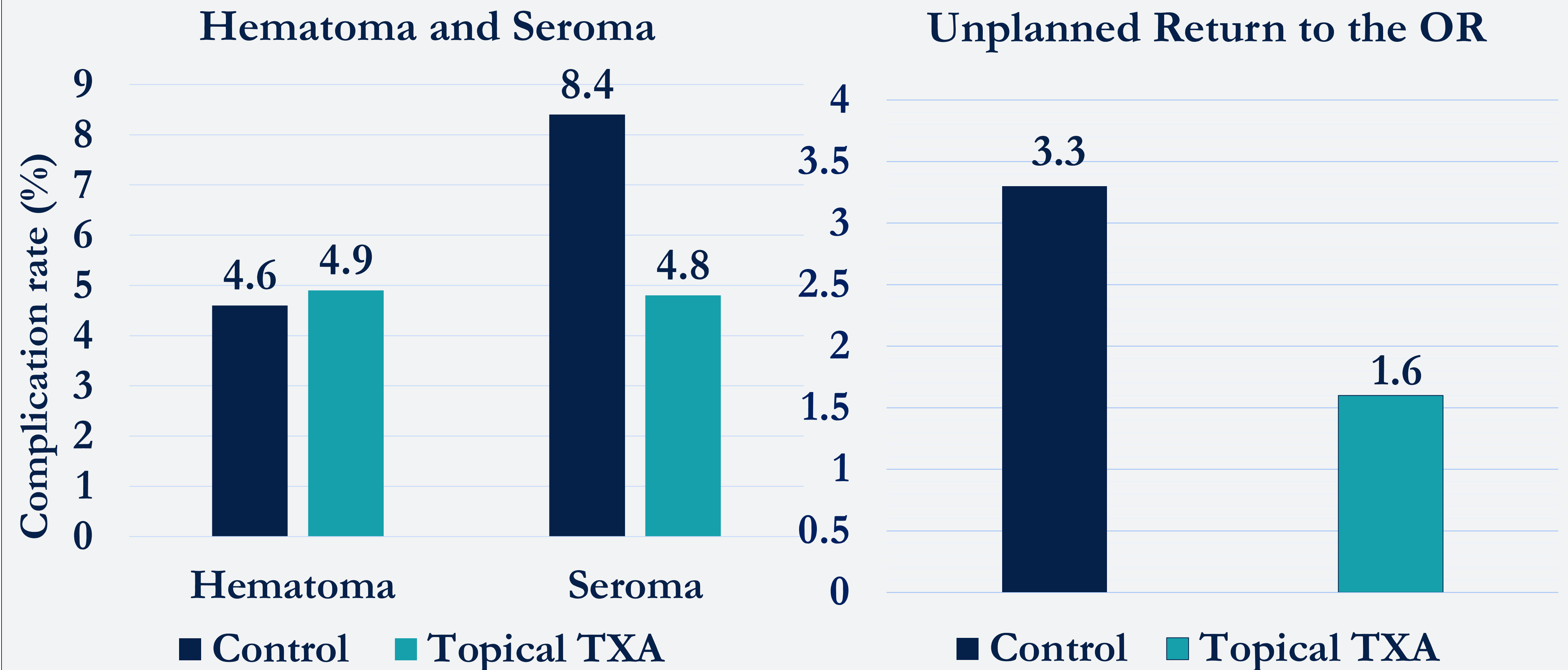
1g/10ml TXA with 10ml 0.9%
NaCl Saline Solution



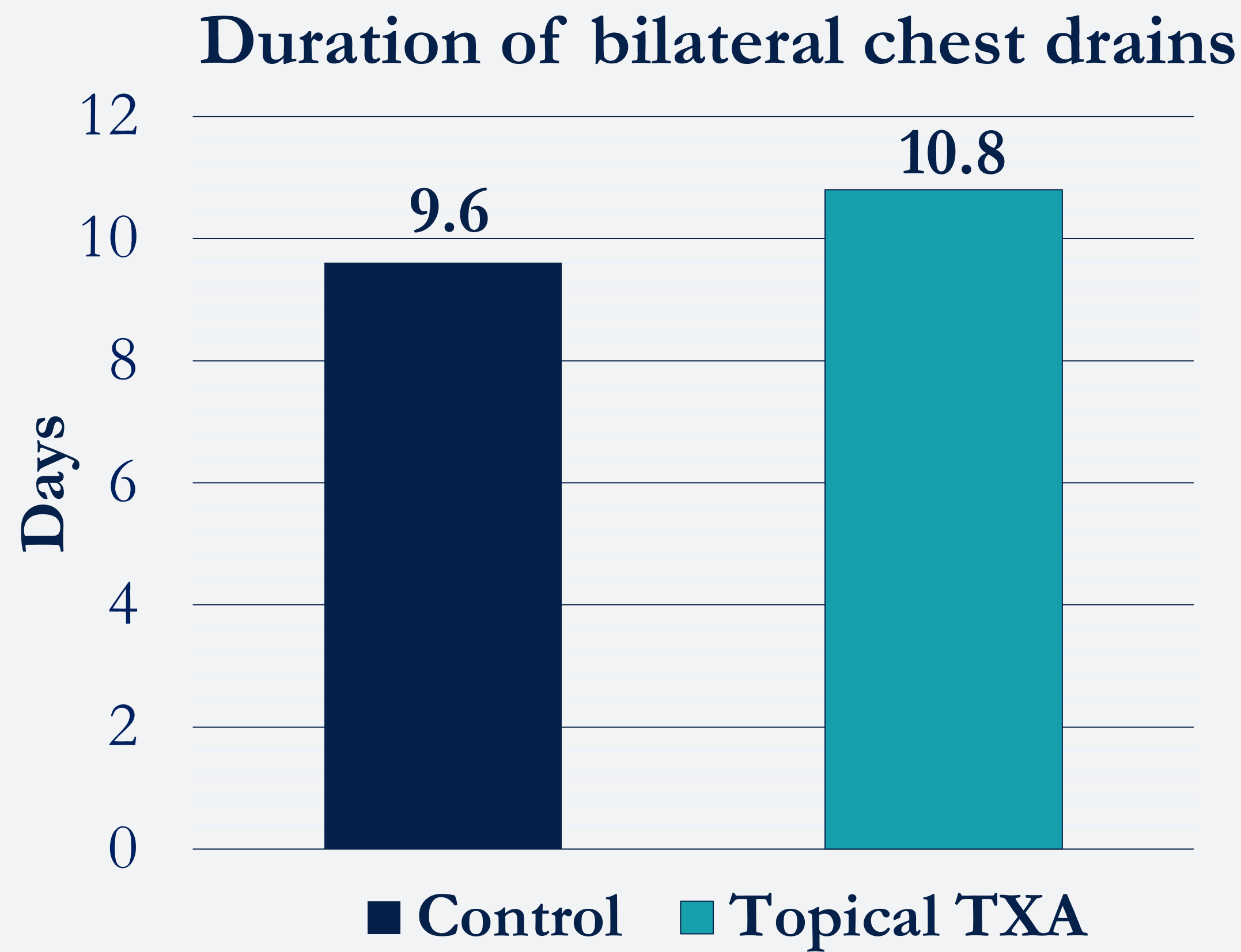
Results

Table 1. Demographics

	Control (n = 394)	Topical TXA (n = 62)	p- value
Mean age, $\pm$ SD, (years)	27.7 $\pm$ 9.1	27.0 $\pm$ 8.9	0.61
Mean BMI, kg/m ² $\pm$ SD	26.7 $\pm$ 5.2	25.9 $\pm$ 4.5	0.27
Smoking Status, n (%)			
Never	266 (69.5)	42 (67.7)	
Former	77 (20.1)	19 (30.6)	0.03*
Current	40 (10.4)	1 (1.6)	
Hypertension	16 (4.1)	3 (4.9)	0.48
Diabetes Mellitus	11 (2.8)	0	0.47
Psychiatric history			
Anxiety	230 (58.8)	47 (75.8)	0.01*
Depression	228 (58.0)	47 (75.8)	0.01*
PTSD	28 (7.2)	8 (12.0)	0.12



Results



Multivariate analysis controlling for age, bmi, hypertension, dm, smoking status, drain duration, topical TXA was **NOT** significantly associated with odds of getting a hematoma or seroma

Conclusion

- No significant improvements in bleeding outcomes with 1 gram of topical TXA on GAM breast wounds
- Alternate routes (i.e. IV & tumescent injection) or higher dosing may be needed to have a significant impact on bleeding outcomes