

Acetylsalicylic Acid Dosage Effects on Deep Inferior Epigastric Perforator (DIEP) Flap Breast Reconstruction

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BACKGROUND

- Deep inferior epigastric perforator (DIEP) flaps are the most commonly used perforator flap utilized for breast reconstruction following mastectomy.
- The employment of microvascular techniques inevitably causes endothelial trauma activating paths of coagulation potentially leading to microthrombosis.
- Multiple pharmacological agents have been investigated for their thrombotic preventative properties in the setting of DIEP flaps with one of these agents being acetylsalicylic acid, or aspirin.
- Current literature evaluating postoperative aspirin in DIEP flaps varies on the dosage, duration, timing, and respective patient outcomes.

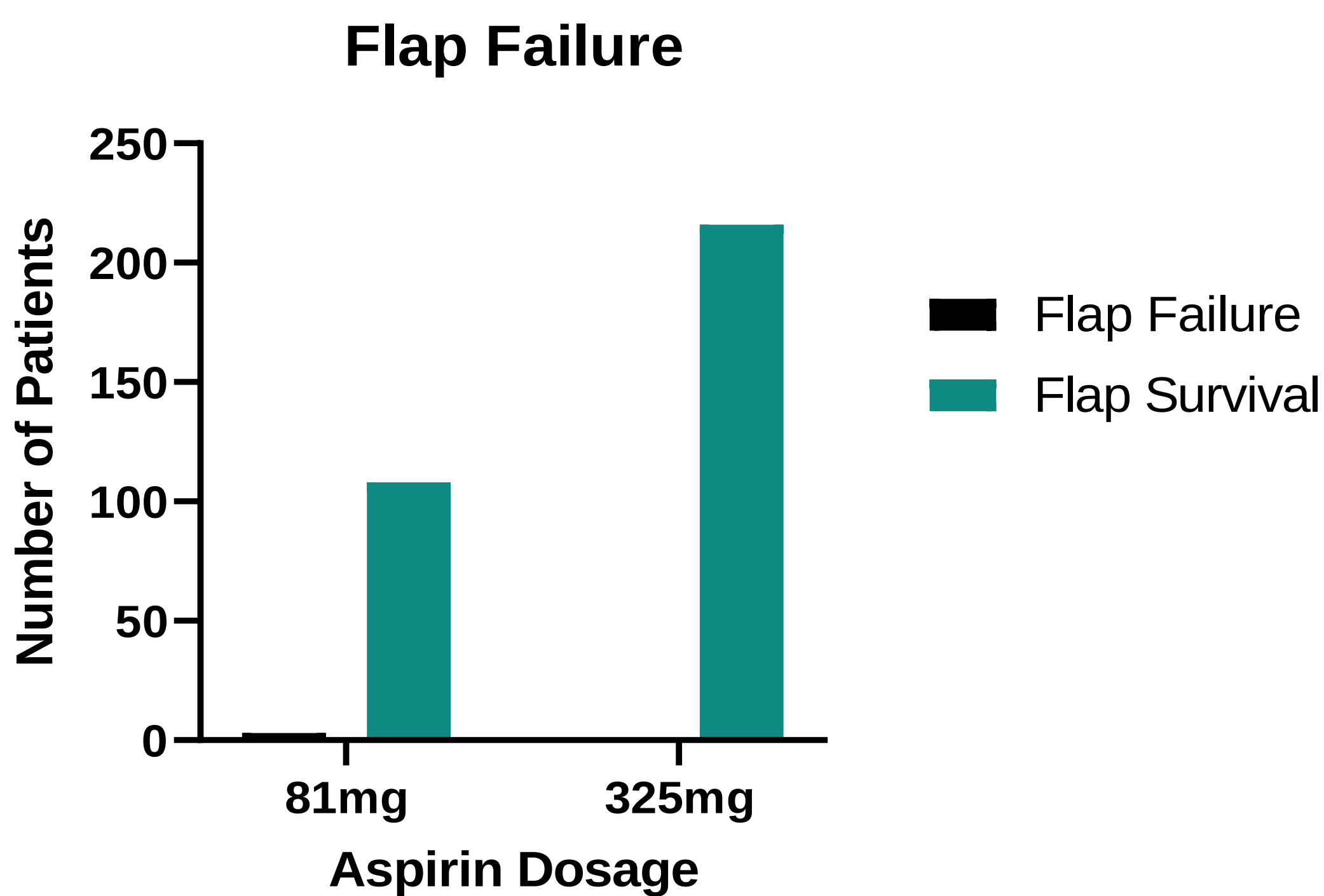
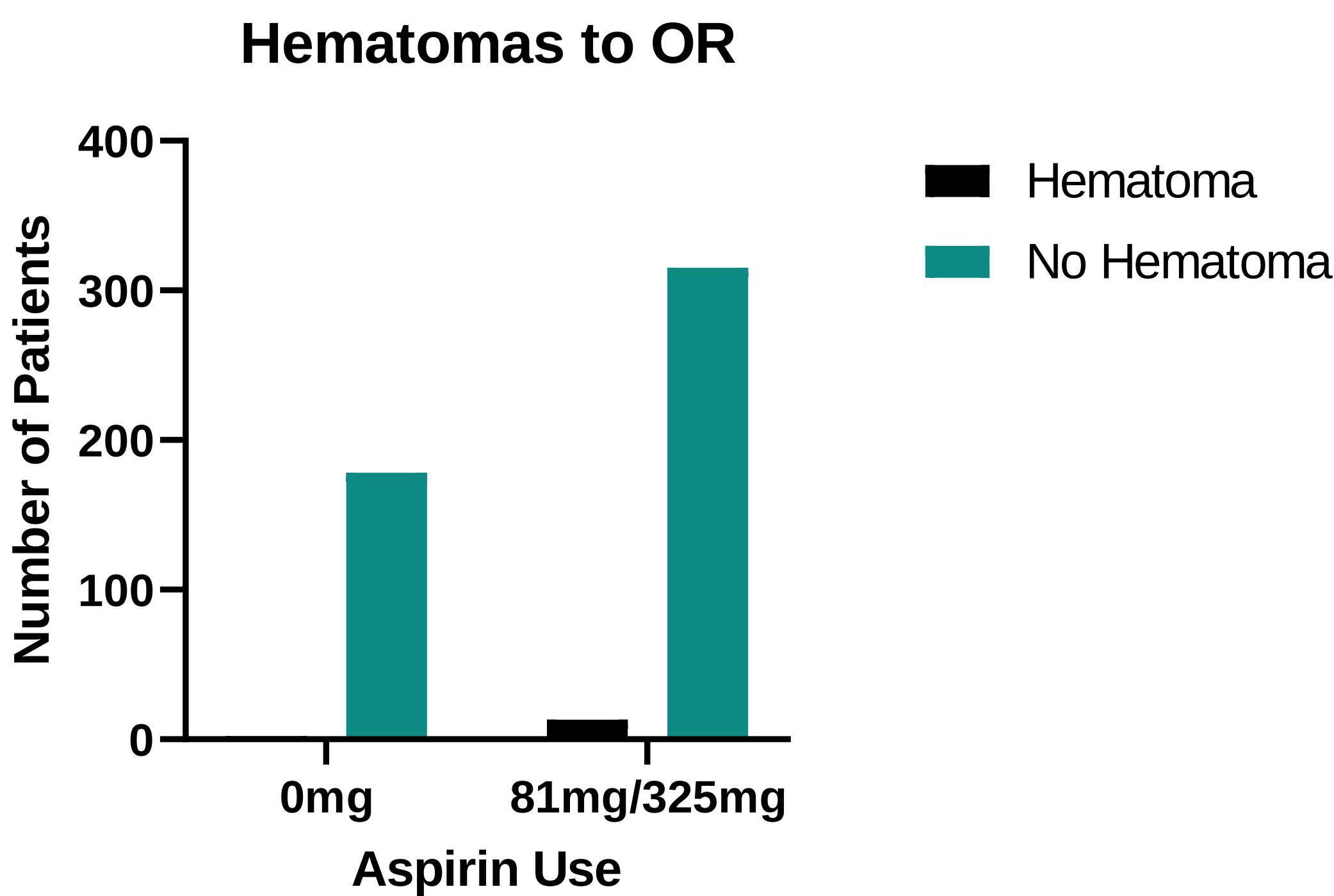
METHODS

- A retrospective review of 508 patients (843 flaps) who underwent DIEP flap breast reconstruction from January 2019-March 2022 at Atrium Health was completed.
- Patient demographics, medical history, operative course, and postoperative complications were collected. Patients were grouped by no aspirin, 81mg, or 325mg postoperative aspirin.

RESULTS

- Statistical analysis was performed using Fisher’s Exact test.
- The no aspirin group experienced zero flap failures. There was no significant difference in flap failure incidence between the 81mg and 325mg groups.
- There was no significant difference in incidence of hematoma requiring return to OR when comparing the no aspirin group to patients taking 81mg or 325mg.
- No difference was found in hematoma incidence for the 81mg versus 325mg group.

Comparison of Complication Incidence by Aspirin Dose Group		
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Flap Failure		
	No Aspirin vs Aspirin	n/a
	81 mg vs 325 mg	0.11
Hematoma to OR		
	No Aspirin vs Aspirin	0.09
	81 mg vs 325 mg	0.37



CONCLUSIONS

- No difference in hematomas requiring operative intervention or flap failures was found in regards to postoperative aspirin use. There was also no difference in hematoma incidence with 81mg compared to 325mg of aspirin.