Does Intraoperative Heparin Administration reduce Postoperative Complications in DIEP Flap Breast Reconstruction?

Edward T.C. Dong[1]; Gauthier Zinner[1], MD; Salvatore Giordano[2], MD, PhD; Carlo M. Oranges, MD, PhD[1].
[1] Department of Plastic, Reconstructive, and Aesthetic surgery, Geneva University Hospitals, Geneva University, Geneva, Switzerland
[2] Department of Clinical Medicine, The University of Turku, Turku, Finland

BACKGROUND

- Microsurgical thrombosis is a critical complication for free flap surgery
- Little evidence exist on intraoperative prophylaxis for DIEP
- We hypothesize that intraoperative administration of heparin bolus can reduce microsurgical complications

METHODS

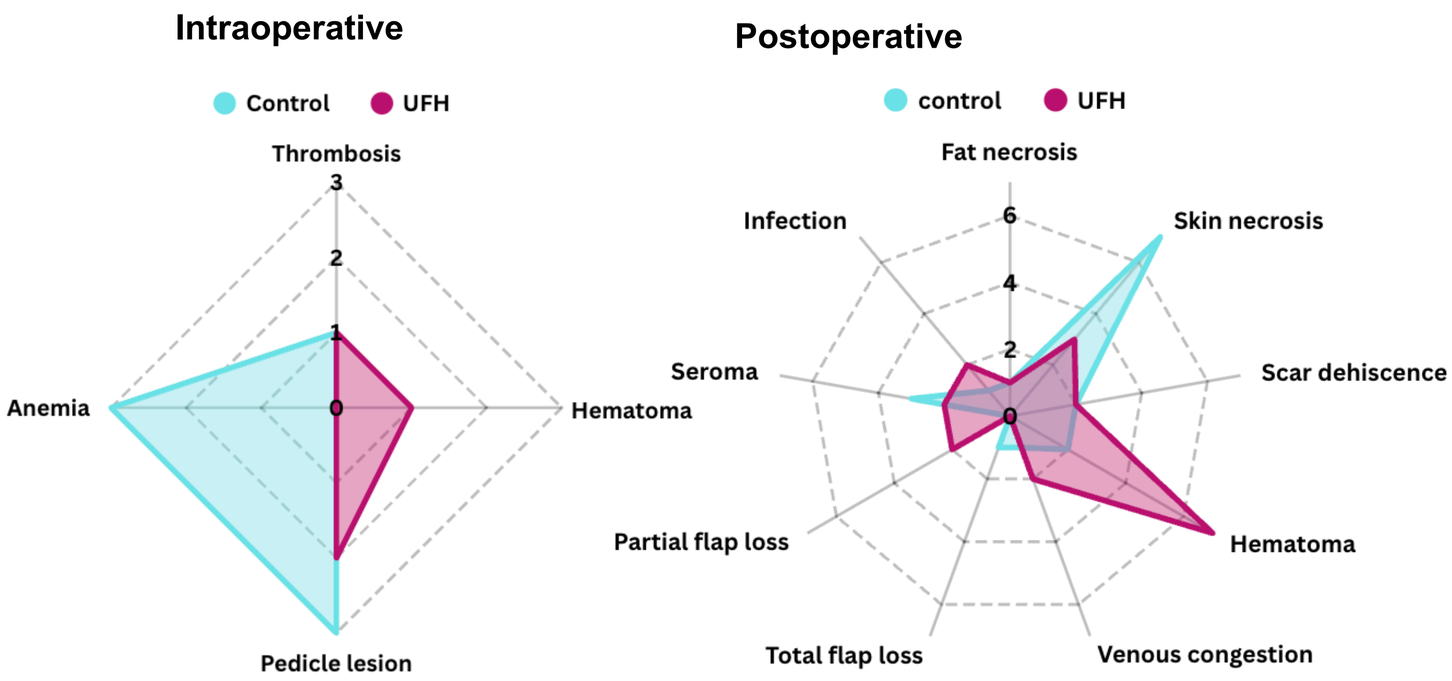
- Retrospective analysis of 114 patients who underwent DIEP flap breast reconstruction from January 2018 to June 2024
- Intraoperative IV injection of 2000 IU Liquemin® (UFH) bolus compared to control group
- Analysis of intraoperative, early (< 4d) and delayed complications

RESULTS AND DISCUSSION

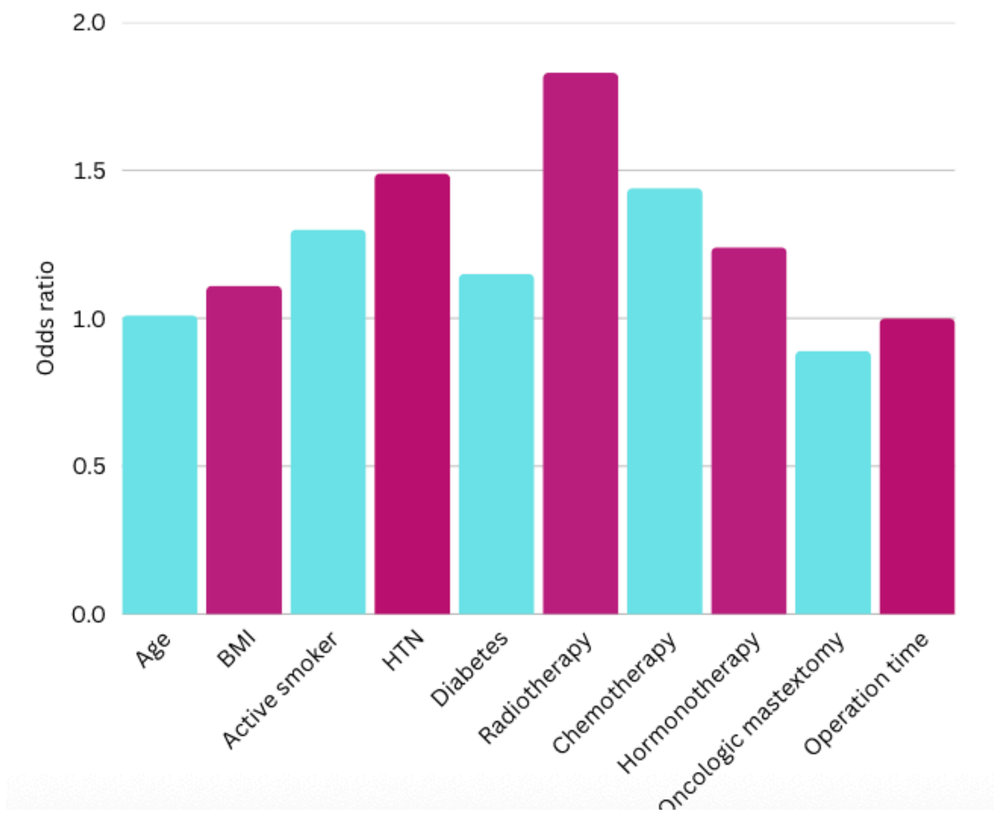
Baseline caracteristics

FEATURES	CONTROL (N=64)	UFH (N=77)	P-value
Baseline characteristics			
AGE [years], mean (SD)	49.8 (8.0)	50.4 (9.6)	0.92
BMI [kg/m2], mean (SD)	27.25 (4.7)	26.4 (3.9)	0.30
Active smokers, n (%)	48 (42.9%)	66 (57.1%)	> 0.99
Comorbidities			
Diabetes, n (%)	2 (2.5%)	3 (10%)	0.093
Hypertension, n (%)	4 (5%)	4 (13.3%)	0.13
Coagulopathy, n (%)	3 (3.75%)	0	**0.019***

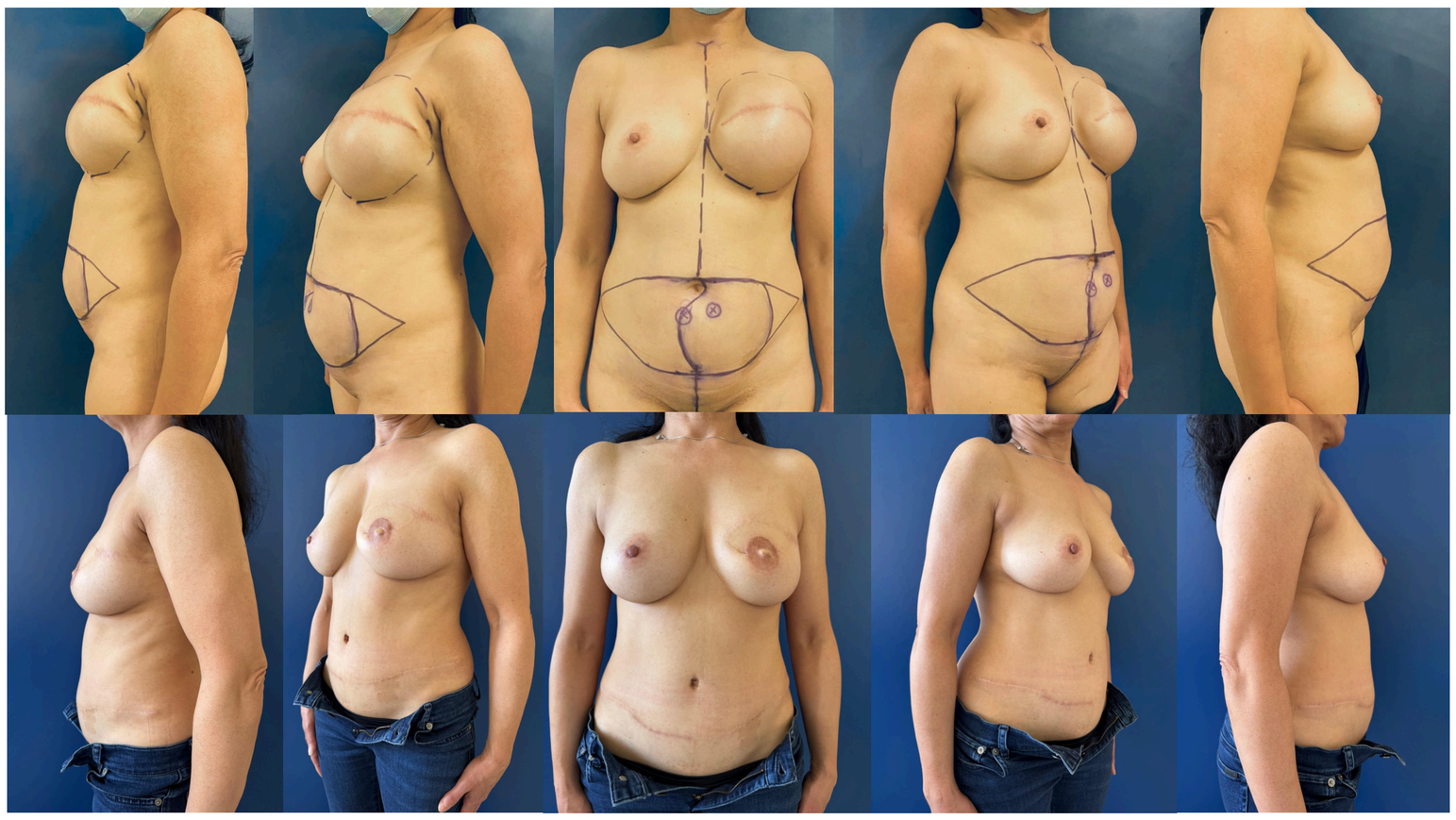
Complications



Confounders



DIEP Flap Breast Reconstruction



CONCLUSION

- Intraoperative UFH does not increase the risk of hematoma
- Intraoperative UFH does not decrease the risk of thrombosis
- Further studies comparing thromboprophylaxis warranted

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FACULTÉ DE MÉDECINE
Service de Chirurgie Plastique et Reconstructive - HUG
UNIVERSITÉ DE GENÈVE