



Superomedial Pedicle Technique is Associated with a Decreased Risk of Complications Compared to Inferior Pedicle

Mount
Sinai

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1. BACKGROUND

- The inferior pedicle (IP) technique in breast reduction surgery has been preferred due to its dependable vascularity, yet it is associated with pseudoptosis and less favorable aesthetic outcomes
- The superomedial pedicle (SMP) technique has gained popularity for producing improved breast shape and projection
- Despite the growing body of evidence, variability remains in reported complication rates and aesthetic outcomes between the two techniques

2. OBJECTIVE

To determine postoperative outcomes between the SMP and IP techniques in reduction mammoplasty in a large cohort analysis

3. METHODS

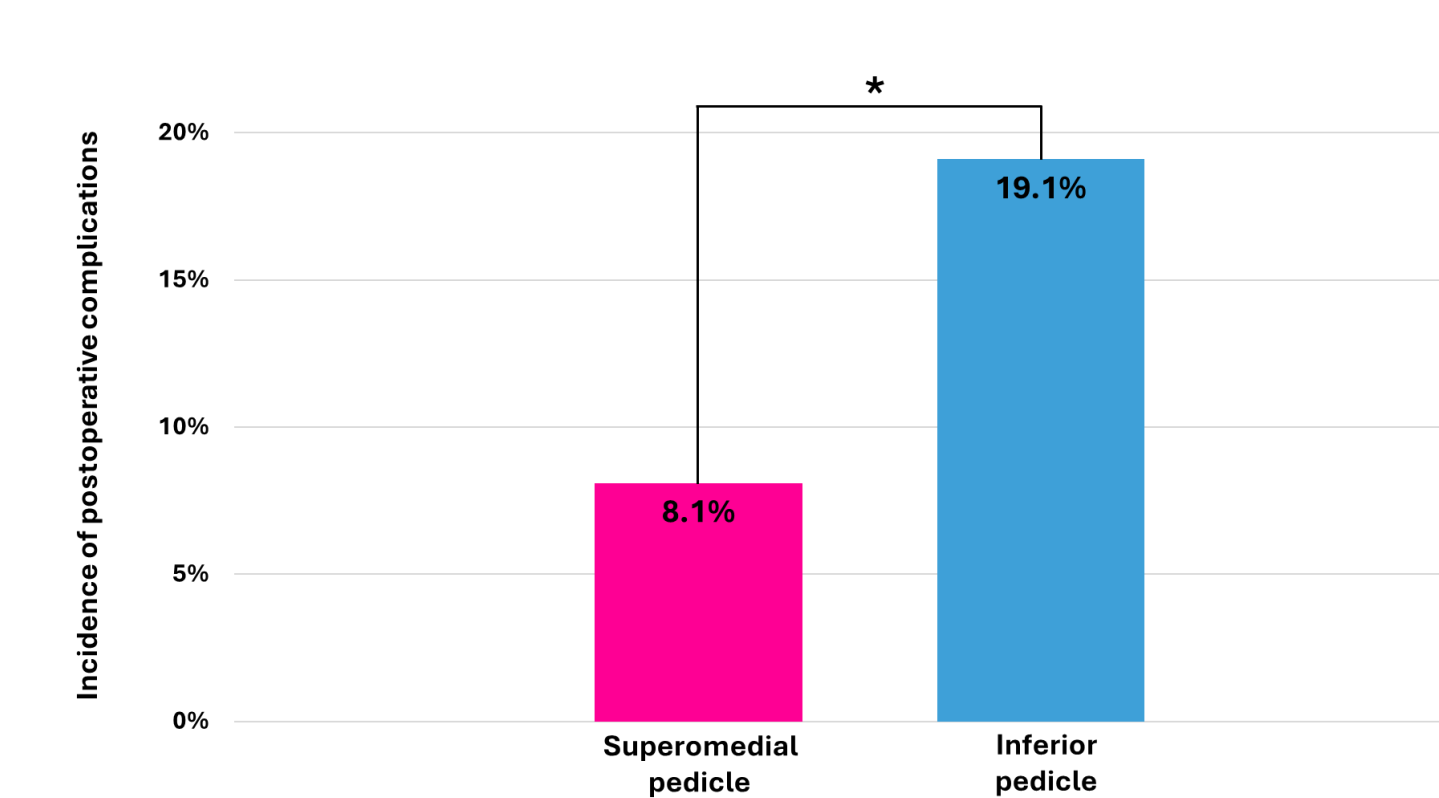
- Design:** Retrospective review of breast reduction surgery (2019-2023)
- Exclusion:** Incomplete data on pedicle
- Cohort:** Superomedial vs. Inferior
- Outcomes:** Any complication, seroma, hematoma, wound dehiscence, T-point breakdown, cellulitis/erythema, fat necrosis, nipple necrosis, & revision surgery
- Data analysis:** Univariate (Pearson chi square, Mann Whitney U) and Multivariable Logistic Regression
- Subgroup analysis**
 - Age (<30, 30-50, >50)
 - BMI (≥ 30)
 - Resection weight (≥ 1000 g)
 - Laterality (Unilateral, Bilateral)

4. RESULTS

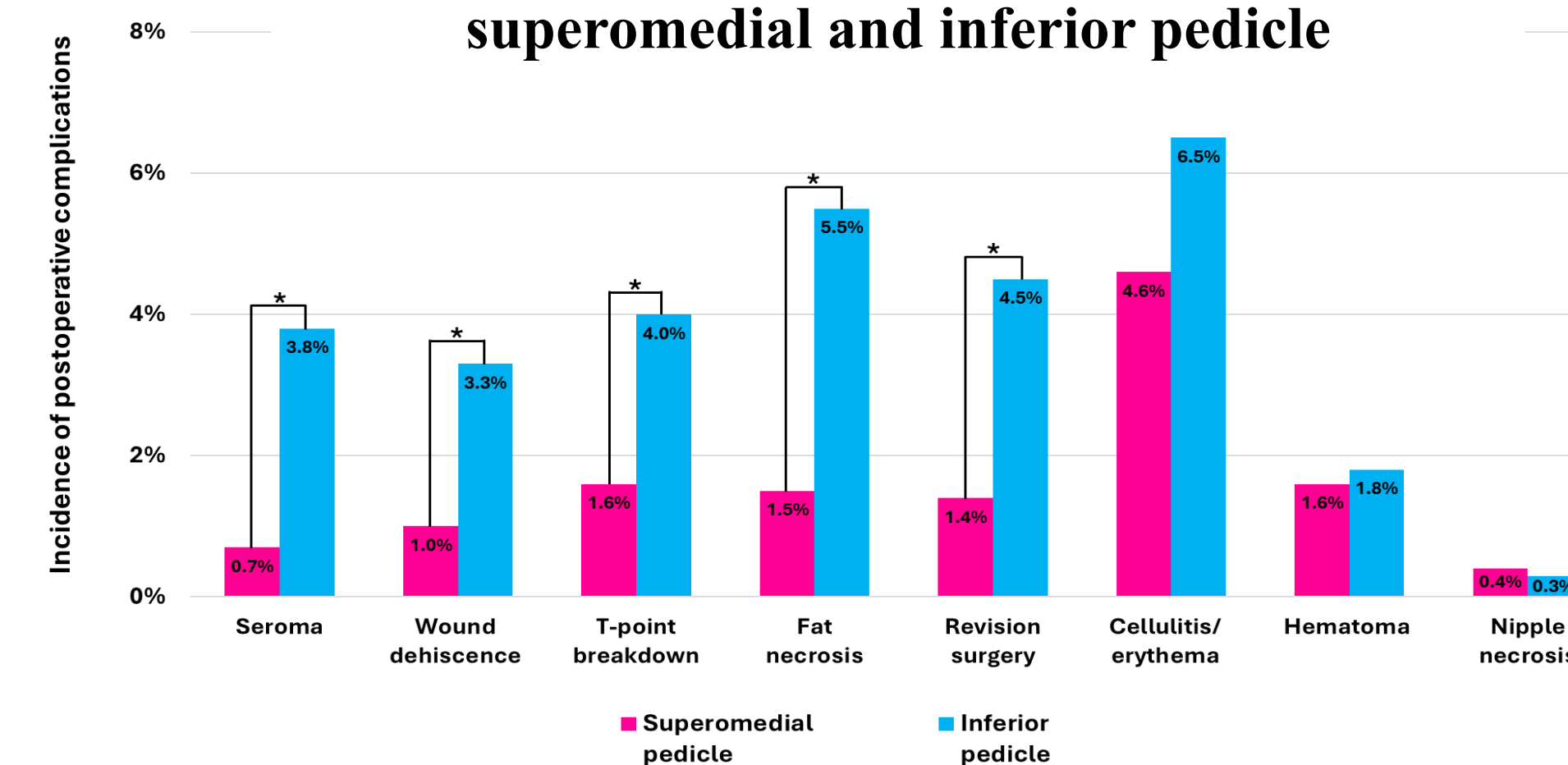
Patient Demographics & Characteristics

Mean $\pm$ SD or % (N)	Superomedial Pedicle	Inferior Pedicle	P value
Total Number of Patients	698	403	
Age (years)	38.5 $\pm$ 14.8	40.9 $\pm$ 15.6	0.018*
BMI (kg/m ²)	29.1 $\pm$ 4.8	31.1 $\pm$ 5.7	<0.001*
History of Breast Cancer	8.3% (58)	20.1% (81)	<0.001*
Type of Reduction			
Unilateral	8.0% (56)	13.9% (56)	0.002*
Bilateral	92.0% (642)	86.1% (347)	
Drain Use	50.9% (355)	70.7% (285)	<0.001*
Operative Time (min)	158.1 $\pm$ 51.8	166.4 $\pm$ 58.7	0.038*
Weight of Tissue Resected (g)	1,069.6 $\pm$ 631.7	1,373.6 $\pm$ 905.4	<0.001*

Overall postoperative complication rate of superomedial and inferior pedicle



Postoperative complication rate of superomedial and inferior pedicle



Multivariable logistic regression to evaluate postoperative complications based on pedicle type

Complication type	aOR	95% CI	P value
Any complication	0.412	0.262 - 0.648	<0.001*
Seroma	0.210	0.060 - 0.731	0.014*
T-point breakdown	0.342	0.133 - 0.880	0.026*
Revision surgery	0.340	0.140 - 0.826	0.017*
Hematoma	1.041	0.333 - 3.252	0.945
Wound dehiscence	0.318	0.097 - 1.035	0.057
Nipple necrosis	3.078	0.270 - 35.09	0.365
Cellulitis/erythema	0.753	0.393 - 1.444	0.393
Fat necrosis	0.436	0.171 - 1.11	0.082

Reference: inferior pedicle; Statistical significance set at $p < 0.05$

Subgroup multivariable logistic regression analysis of postoperative complications

Variable	Subgroup	aOR	95% CI	P value
Age	<30	0.583	0.271 - 1.252	0.166
	30-50	0.303	0.135 - 0.680	0.004*
	>50	0.364	0.138 - 0.957	0.040*
BMI	<30	0.285	0.141 - 0.577	<0.001*
	≥ 30	0.483	0.264 - 0.885	0.018*
Resection weight	≥ 1000 g	0.480	0.266 - 0.869	0.015*
Laterality	Unilateral	1.069	0.162 - 6.943	0.944
	Bilateral	0.362	0.221 - 0.593	<0.001*

5. CONCLUSION

- SMP has a lower rate of postoperative complications, including seroma, T-point breakdown, and revision surgery
- SMP associated with decreased risk in ages >30, elevated BMI, and high resection weight

5. CLINICAL RELEVANCE

In patients undergoing inferior pedicle breast reduction, it is important to closely monitor for wound healing complications

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