

Reduction Mammoplasty: Drains Do Not Reduce Hematoma or Seroma, but Increase Infection Risk

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Background

Most surgeons in Europe continue to utilize drains after reduction mammoplasty, but the trend in North America has recently leaned heavily toward no drain utilization for reduction mammoplasty.

Purpose

The purpose of this study was to determine whether drain utilization after reduction mammoplasty decreases incidence of postoperative complications.

Methods

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Study Design: Retrospective cohort study
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Participants: All reduction mammoplasty procedures
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Institutions: Vanderbilt University Medical Center
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Dates: 2010-2020
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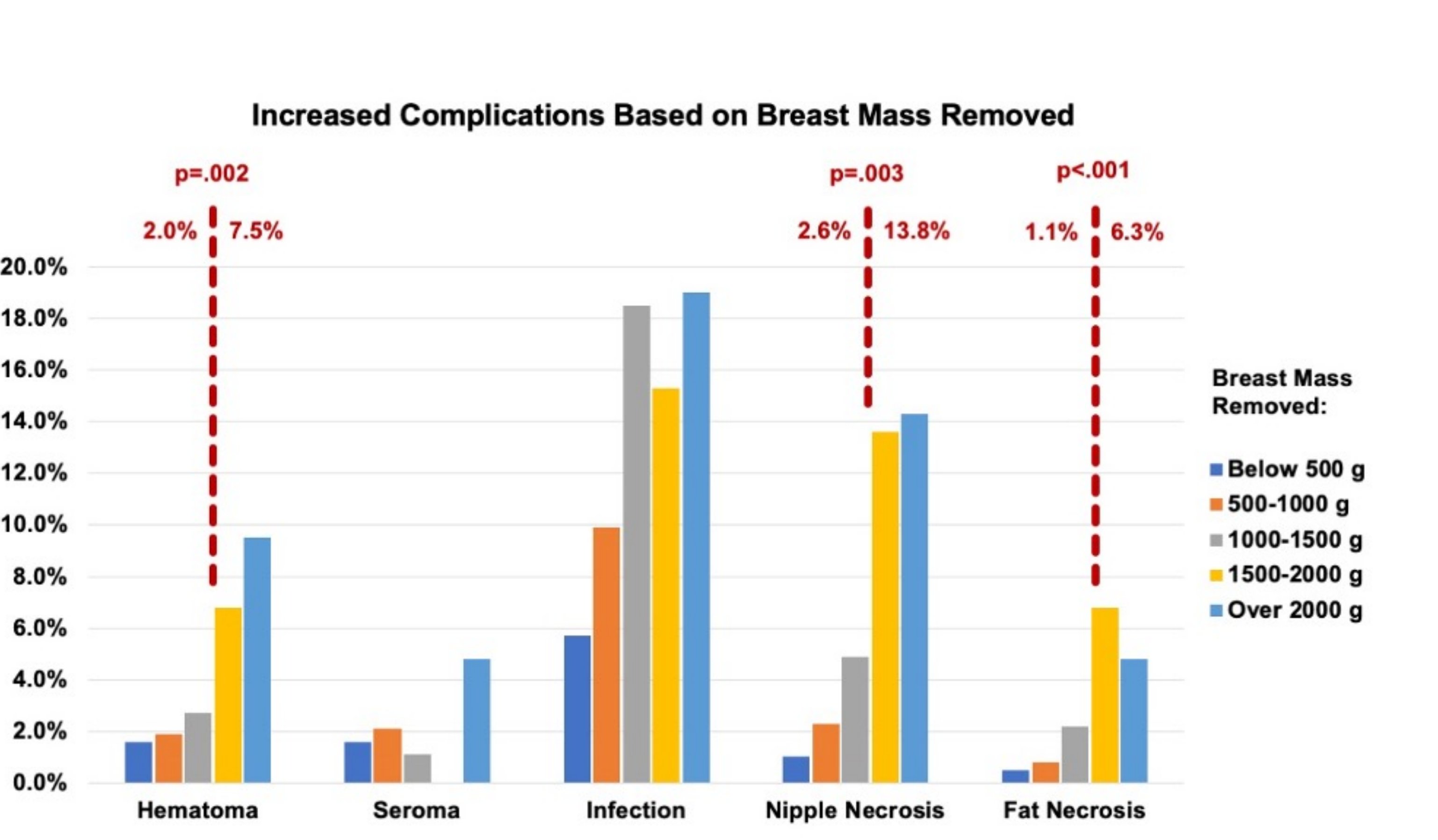
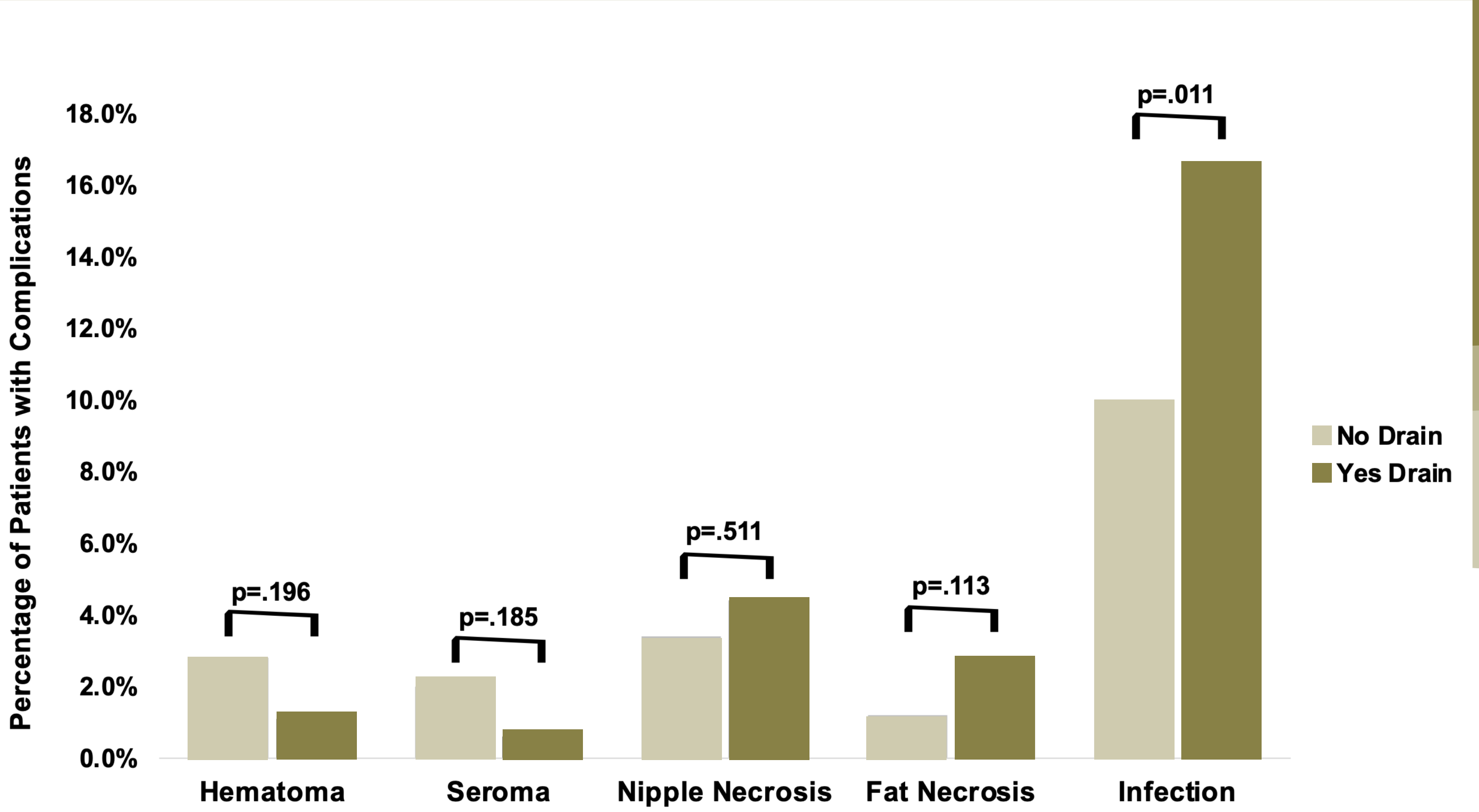
Outcomes: Hematoma, seroma, dehiscence, nipple necrosis, fat necrosis, infection

Results

- 944 female** patients undergoing reduction mammoplasty
 - Majority of cases did not utilize postoperative drains (80.3%, n=763 of 944)
- Drain utilization** did not significantly reduce postoperative hematoma (p=.196), seroma (p=.185), dehiscence (p=.436), nipple necrosis (p=.511), or fat necrosis (p=.113), but drain use significantly **increased postoperative infection** (p=.011, 16.6% vs 10.0%)
- Infections** were more common in patients with older age (p=.015), higher BMI (p=.001), longer SNN (p=.048), and breast mass removed (p<.001)
- Wound dehiscence** was more common in patients with higher BMI (p<.001), longer SNN (p=.013), and breast mass removed (p<.001)
- Nipple necrosis** was more common in patients with older age (p=.021), higher BMI (p<.001), longer SNN (p=.003), IMFN (p=.029), and breast mass removed (p<.001)
- Fat necrosis** was more common in patients with higher BMI (p=.005), longer SNN (p<.001, 37.8 vs 33.5 cm), IMFN (p=.005), and breast mass removed (p=.001)

Conclusions

Drain utilization does not reduce hematoma or seroma risk, but significantly increases risk of infection after reduction mammoplasty. Breast reduction greater than 1500 g per side significantly increased risk of hematoma, nipple necrosis, and fat necrosis.



	Infection	Dehiscence	Nipple Necrosis	Fat Necrosis
Age	p=.015		p=.021	
Body Mass Index	p=.001	p<.001	p<.001	p=.005
SNN Distance	p=.048	p=.013	p=.003	p<.001
IMFN Distance			p=.029	0.005
Breast Mass Removed	p<.001	p<.001	p<.001	p=.001