

Gender Affirming Mastectomy: Risk Factors for Complications

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Introduction

- Gender-affirming mastectomy (GAM) is part of a multidisciplinary approach in treatment of gender dysphoria.
- Improved acceptance of transgender individuals has led to increased rates of GAM procedures.
- Reported complications include seroma, hematoma, and skin necrosis.
- The purpose of this study is to determine **risk factors** for these common complications.

Methods

- A retrospective review analyzed consecutive patients receiving GAM from September 2022 to October 2024.
- Patient demographics, preoperative factors, and operative details were collected and analyzed to determine significant predictors of complications.
- Statistics were calculated using multivariable analysis accounting for baseline demographic differences using Stata. Significance was set to $p < 0.05$.

Table 1: Logistic Regression Analysis of Seroma

Variable	Odds Ratio	95% CI	Significance
BMI	1.23	1.09 – 1.40	0.001
Tumescent volume	1.01	0.99 – 1.01	0.706
SNN	0.95	0.81 – 1.10	0.486
NIMF	1.17	1.02 – 1.35	0.023
Estimated Blood loss	1.01	0.99 – 1.02	0.610
Liposuction	0.16	0.02 – 1.18	0.073
Drain Use	0.01	0.00 – 0.15	0.001

Table 1. Multivariable model comparing predictors for seroma formation. Patients with higher BMI and increased nipple to inframammary fold distance had a higher odds of seroma formation.

Table 2: Logistic Regression Analysis of Dehiscence

Variable	Odds Ratio	95% CI	Significance
Age	0.96	0.89 – 1.03	0.247
BMI	1.07	0.96 – 1.19	0.214
BW	0.99	0.79 – 1.27	0.999
IV Fluids	0.99	0.99 – 1.00	0.061
Estimated Blood Loss	1.02	1.01 – 1.03	0.008

Table 2. Multivariable model comparing predictors for dehiscence formation. Increased surgeon reported blood loss was significantly associated with increased odds for dehiscence.

Results

- 77 patients were included, with 154 breasts analyzed
- **Significant predictors for seroma (Table 1):**
 - **BMI: OR 1.23, $p=0.001$**
 - **Nipple to Inframammary Fold Distance: OR 1.17, $p=0.023$**
- Drain use was a protective factor against seroma formation: OR 0.01, $p<0.001$
- **Significant predictors for wound dehiscence (Table 2):**
 - **Increased estimated blood loss: OR 1.02, $p=0.008$**

Conclusion

- Seroma and wound dehiscence are common complications following GAM, **with higher BMI, greater nipple-to-inframammary fold distance, and increased estimated blood loss** identified as key risk factors.
- Awareness of these predictors may guide clinicians in intraoperative management decisions to potentially reduce complication rates.