

Surgical Options at the Time of Ruptured Breast Implant Removal: A NSQIP Analysis

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Background

Implant rupture is a potential complication in patients with breast implants. Following rupture, patients may elect to replace their implants or opt for other options such as autologous reconstruction and mastopexy.

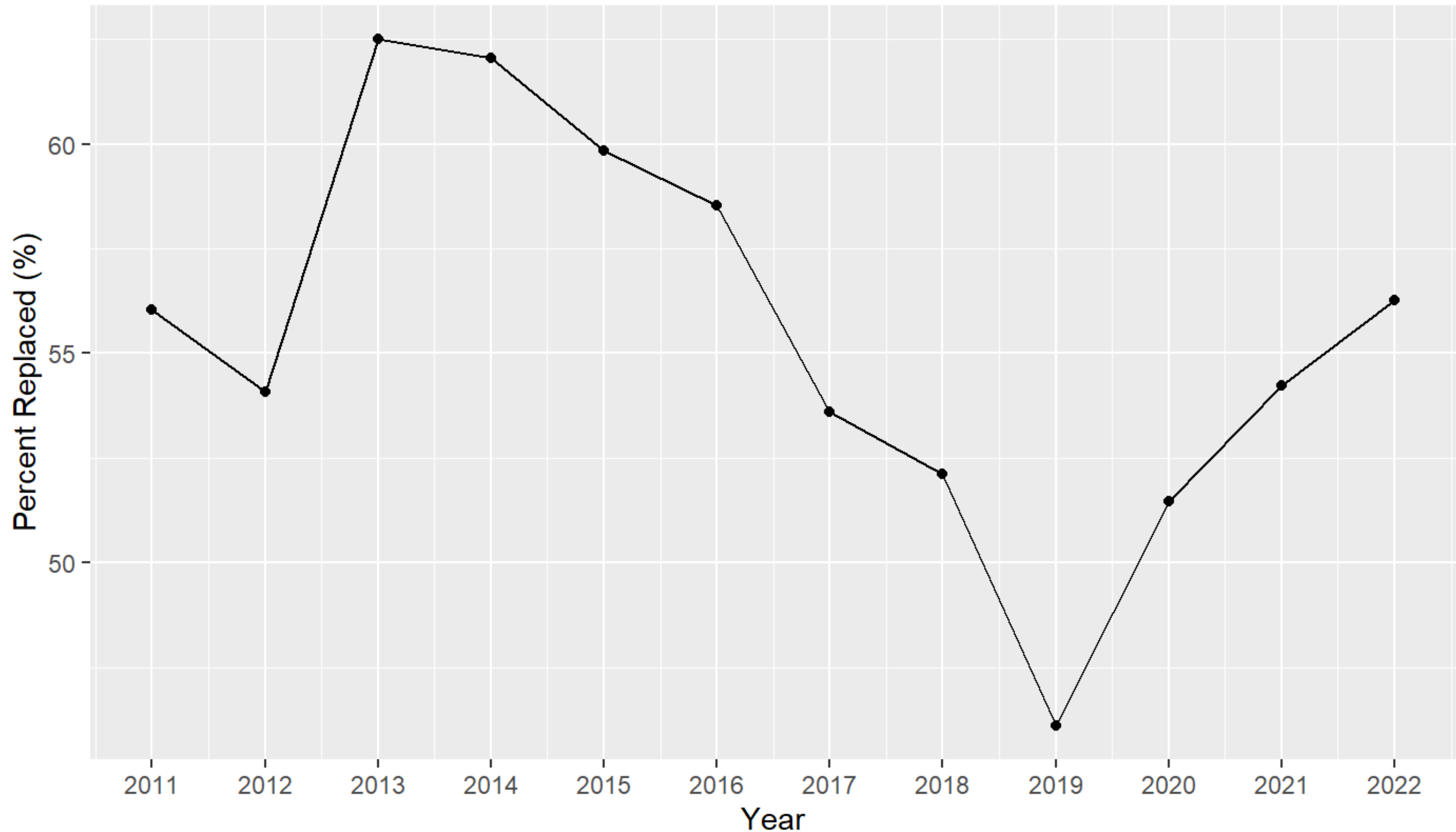
Research Objectives

This study aims to understand the demographic characteristics and outcomes of cosmetic patients who choose to have their implants replaced following the removal of ruptured breast implants compared to those who opted for alternative methods.

Methods

- The National Surgery Quality Improvement Program (NSQIP) database was used to identify cases ruptured breast implants (CPT 19330) between 2011 and 2022.
- Breast cancer patients were excluded to focus on cosmetic patients
- Demographic characteristics and surgical outcomes were compared for patients undergoing implant replacement versus other options

Trends in implant replacement for breast implant rupture



Surgical outcomes – implant replaced vs not replaced

Surgical Complication	Implant not replaced (n = 1,366)	Implant replaced (n = 1,662)
Superficial incisional infection	17 (1.2%)	15 (0.9%)
Abscess	17 (1.2%)	10 (0.6%)
Dehiscence	5 (0.4%)	8 (0.5%)
Bleeding*	7 (0.5%)	0 (0.0%)

*statistically significant at the p < 0.05 level

Results

Patients who replaced their implants following rupture were younger (mean age 56.3 vs 57.6), had lower BMI (26.2 vs 27.3), and were more commonly white (77.9% vs 63.3%).

Trends in implant replacement fluctuated over time, but the majority (54.9%) of patients opted for implant replacement after rupture.

Patients who did not replace their ruptured implants had higher rates of bleeding requiring a transfusion (p = 0.01). General complications (reoperation, readmission) and other surgical complications were comparable.

Limitations

Retrospective analysis, reliance on CPT/ICD codes and individual institutional data, and lack of long-term follow up.

Conclusion

Patients who replace their implants following rupture were younger, had lower BMI, and were associated with lower rates of surgical complications compared to patients who did not have their implants replaced.