Predictors of readmission after outpatient plastic surgery

Lauren M Mioton, BS; Donald W Buck II, MD; Aksharananda Rambachan, BA; Jon Ver Halen, MD; Gregory A Dumanian, MD; John YS Kim, MD

Abstract

Background: Hospital readmissions have become a topic of focus for quality care measures and cost reduction efforts. However, no comparative multi-institutional data on plastic surgery outpatient readmission rates currently exists. We endeavored to investigate hospital readmission rates and predictors of readmission following outpatient plastic surgery. (1-5)

Methods: The 2011 National Surgical Quality Improvement Program (NSQIP) database was reviewed for all outpatient procedures. Unplanned readmission rates were calculated for all ten tracked surgical specialties (general, thoracic, vascular, cardiac, orthopedics, otolaryngology, plastics, gynecology, urology, and neurosurgery). Multivariate logistic regression models were used to determine predictors of readmission for plastic surgery.

Results: A total of 7005 outpatient plastic surgery procedures were isolated. Outpatient plastic surgery had a low associated readmission rate (1.94%) compared to other specialties. Seventy-five patients were readmitted with a complication. Multivariate regression analysis revealed obesity (BMI≥ 30), wound infection within 30 days of the index surgery, and ASA class 3 or 4 as significant predictors for unplanned readmission.

Conclusions: Unplanned readmission after outpatient plastic surgery is infrequent and compares favorably to rates of readmission among other specialties. Obesity, wound infection within 30 days of the index operation, and ASA class 3 or 4 are independent predictors of readmission. As procedures continue to transition into outpatient settings and the drive to improve patient care continues, these findings will serve to optimize outpatient surgery utilization.

References

Disclosure/Financial Support
The authors have no financial disclosures relevant to this paper. None of the authors has a financial interest in any of the products, devices, or drugs mentioned in this manuscript.