“I Can’t Believe You’re Back:” Expanded 30-day Readmissions After Plastic Surgery

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INTRODUCTION: Hospitals are working to reduce 30-day readmissions, driven by financial and quality incentives previously affecting only medical conditions but now affecting surgical procedures relevant to plastic surgeons;[1] however, little is known about the reasons for readmission.[2,3]

METHODS: Patients who underwent surgery by plastic surgeons were identified from the 2012-2013 National Surgical Quality Improvement Program database. Readmission characteristics following 14 types of plastic surgery procedures were divided into 11 groups and compared across procedure types.

RESULTS: Plastic surgery identified procedure codes yielded 31,561 patients. Of these, 1,162 experienced a 30-day all-cause readmission (3.7%). Most readmissions were unplanned at time of discharge (1,064, 91.6%). The majority of unplanned readmissions were directly related to the index hospital procedure (879, 75.6%), producing a gross 2.8% rate of unplanned readmissions related to plastic surgery procedures.

The highest readmission rate (9.6%) was associated with free flaps for non-breast reconstruction; the lowest rates of 0% and 1.7% were after gynecomastia and hand/nerve surgery, respectively. Importantly, 61.9% of readmissions were for wound problems: infections (45.2% of unplanned readmissions related to index procedure, 1.2% absolute rate) or other wound complications (16.7%, 0.5%); few were readmitted for pain (1.8%, 0.1%) or bleeding (2.3%, 0.1%), although notably almost half (45.0%) of all readmissions for bleeding came after panniculectomy/abdominoplasty. Readmissions for venous thromboembolic disease were seen across all procedures except gynecomastia (n=125) and craniofacial surgery (n=832), but all were <1.0% and most were <0.5%.

When all procedures were examined together no clustering of readmission timing was seen; patients were readmitted evenly throughout the 30-day postoperative period; however analyses within individual complications showed variability: readmissions for bleeding or hemorrhage most often occurred within the first week, while readmissions for surgical site infections more commonly began a few days after the procedure and continued throughout the 30-day post-op period.

CONCLUSION: Readmission after plastic surgery remains low, with substantial variance among procedure types. Readmission most commonly (over 60%) results from wound complications. These findings can assist surgeons and health systems to tailor preoperative risk counseling and postoperative discharge services for patients planning to undergo various types of plastic surgery procedures.

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