

Outpatient shoulder arthroplasty: outcomes, complications, and readmissions in 2 outpatient settings

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As annual growth rates range between 5-13% annual growth in the US,¹ the authors believe this will cause an increasing burden on the healthcare system in terms of costs and resources. Additionally, research has shown patients to have a positive experience with outpatient arthroplasty but a concern for possible postoperative complications persist. Finally, the authors cite the rapid movement of hip and knee procedures moving to outpatient procedures due to bundled payments regardless of higher complication and readmission rates for lower-arthroplasty when compared to upper-extremity arthroplasty. These current factors lead the authors to hypothesize that the rate of early complications for outpatient shoulder arthroplasty would be low and similar to current inpatient procedural complication and readmission rates while reducing the cost burden by an estimated \$4000 per procedure.²

This retrospective review of 50 of their patients having had either a hemi-arthroplasty, anatomic arthroplasty or reverse arthroplasty shoulder procedure intended to present results from either an Ambulatory Surgery Center (ASC) or hospital-associated surgical centers (HASC). Patient results were measured at a minimum of 3 months follow-up.

Key takeaways

- Procedures included: 44 anatomic, 4 reverse and 2 hemi-arthroplasty procedures.
- Readmission and complication rates were recorded for a minimum follow-up of 3 months or more.
- Preoperative and postoperative functional measurements include the SANE evaluation, the ASSES and visual analog scores.
- 6 total complications occurred (12%) with 4 (8%) occurring in the 90-day global period and only 1 (2%) patient required readmission.
- Published complication rates range from 3 to 9%.³
- At last follow-ups, all patients had significant improvements in functional scores and range of motion.
- There were no differences with complications or functional outcomes between either the ASC or HASC patients.
- Conclusion: with good patient selection, shoulder arthroplasty can be performed safely and effectively in the outpatient settings, both ASC and HASCs, with complication and readmission rates similar to inpatient procedures.

1 Day JS, Lau E, Ong KL, Williams GR, Ramsey ML, Kurtz SM. Prevalence and projections of total shoulder and elbow arthroplasty in the United States to 2015. *J Shoulder Elbow Surg* 2010;19:1115-20.

2 Cancienne JM, Brockmeier SF, Gulotta LV, Dines DM, Werner BC. Ambulatory total shoulder arthroplasty: a comprehensive analysis of current trends, complications, readmissions, and costs. *J Bone Joint Surg Am* 2017;99:629-37.

3 Chalmers PN, Gupta AK, Rahman Z, Bruce B, Romeo AA, Nicholson GP. Predictors of early complications of total shoulder arthroplasty. *J Arthroplasty* 2014;29:856-60.

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