

Does Total Shoulder Arthroplasty Improve Patients' Activity Levels?

Keith M. Baumgarten, MD, Peter S. Chang, MD, Tasha M. Dannenbring, PhD, Elaine K. Foley, BS

J Shoulder Elbow Surg. 2018 Nov;27(11):1987-1995.

The abstract can be found at: doi: [10.1016/j.jse.2018.03.028](https://doi.org/10.1016/j.jse.2018.03.028)

Total shoulder arthroplasty has been proven to reduce a patient's pain and to improve their range of motion, strength and functioning by treating osteoarthritis or rotator cuff arthropathy. While a patient's pain, functioning and strength generally improves post shoulder arthroplasty, this non-sport related study aimed to examine the patient's return to activity post TSA and RTSA procedures. Utilizing the Shoulder Activity Level outcomes tool designed by Brophy, et al. and additional secondary outcomes tools, the authors hypothesized both TSA and RTSA would result in improved patient activity levels.

This retrospective, primary outcomes study included many secondary evaluations to determine pre- and post-activity levels in 133 patients with a minimum of 2 years follow up. Results included 80 anatomic TSAs and 42 reverse TSAs from patients starting in 2008.

Key takeaways

- Seventy-four patients underwent 80 anatomic shoulder procedures and 41 patients underwent 42 reverse total shoulder procedures. Women represented 53% and 52% of the patients in each cohort of the study, respectively.
- Mean age for the anatomic procedures was 68.9 and 74 for reverse procedures with a follow-up average of 3.7 years.
- Secondary outcome scores included the Western Ontario Osteoarthritis of the Shoulder Index (WOOS), American Shoulder and Elbow (ASES) Standardized Shoulder Assessment Score, the Simple Shoulder Test (SST) and the Single Assessment Numeric Evaluation (SANE) scores.
- Secondary scores were utilized to ensure the primary procedures had a positive influence on patients' quality of life outcomes.
- Upon analysis, neither the anatomic nor reverse cohorts reached significant improvements individually but when combined for greater sample size, results reached significant improvements.
- Both age and gender influenced patient activity levels with men having greater mean activity level improvements than women and patients in the 50-70 age group had higher mean scores than patients older than 70.
- In conclusion, for patients who underwent TSA or RTSA, both activity levels and quality of life scores improved.

This document is intended solely for the use of healthcare professionals. A surgeon must always rely on his or her own professional clinical judgment when deciding whether to use a particular product when treating a particular patient. Stryker does not dispense medical advice and recommends that surgeons be trained in the use of any particular product before using it in surgery. Stryker Corporation or its divisions or other corporate affiliated entities own, use or have applied for the following trademarks or service marks: Stryker. All other trademarks are trademarks of their respective owners or holders.

Content ID: AP-013804B 18-Mar-2022 Copyright © 2022 Stryker