

Session/Poster#

Presenter

**B41**

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### **Is it Safe to Perform Reverse Shoulder Arthroplasty in Patients Under 55 Years of Age?**

**Introduction:** Reverse Shoulder Arthroplasty (RSA) is a common surgical procedure that differs from standard shoulder replacement. In RSA, the natural positions of the ball and socket parts of the glenohumeral joint are reversed. Traditionally, RSA has been reserved for patients older than 60 years of age but recently has been performed on younger patients. It remains to be determined how younger patients will fare after RSA surgery. The objective of this study is to compare postoperative outcomes between patients under 55 years of age and over 55 years of age who have undergone RSA.

**Methods:** The New York Statewide Planning and Research Cooperative System was queried to identify patients who underwent RSA surgery (ICD9: 8188) with at least a 2-year follow-up. 1:1 propensity score match (PSM) controlling for sex, race, and obesity status was performed. Univariate analysis was used to compare differences in postoperative complications, revisions, reoperations, readmission, and in-hospital mortality in the under-age 55 cohort. Multivariate logistic regression analysis controlling for sex, race, and obesity status was performed to determine age group status as an independent risk factor for postoperative outcomes between the two cohorts.

**Results:** PSM yielded 94 total patients divided into two cohorts of 47 patients each with an average age of 73.5 years and 48.7 years. Both cohorts had similar incidences of obesity (10.6% vs 8.5%). The younger cohort experienced lower rates of overall postoperative medical complications following RSA surgery ( $p=0.006$ ). The younger cohort was at a lower risk for experiencing overall postoperative medical complications (OR=0.2) following RSA surgery.

**Discussion and Conclusion:** Patients under the age of 55 are at a decreased risk of experiencing medical complications following RSA compared to patients older than 55. Hesitancy of performing RSA on patients younger than 55 is not supported by these findings.