

Effects of Having Acquired Immunodeficiency Syndrome on Postoperative Outcomes of Primary Shoulder Arthroplasty Patients

Introduction: Acquired immunodeficiency syndrome (AIDS) is a chronic, potentially life-threatening condition. The impact of having AIDS on postoperative outcomes of patients undergoing primary shoulder arthroplasty (PSA) is poorly understood. The purpose of this research is to characterize postoperative outcomes between AIDS patients and a control cohort undergoing PSA surgery.

Methods: The National Inpatient Sample was queried to identify patients who underwent PSA surgery (ICD-9-CM: 81.80, 81.81, 81.88) from the years 2005 – 2012. Patient demographics and incidence rates of patients that had been diagnosed with AIDS were reported from the years 2005 – 2012. 1:1 propensity score match controlling for age, sex and obesity was performed. Univariate analysis was used to compare differences in postoperative complications, revision of shoulder arthroplasty (ICD-9-CM: 81.97), and in-hospital mortality between the AIDS and non-AIDS cohorts after PSA surgery. Multivariate logistic regression analysis controlling for age, sex, and obesity was done to determine AIDS status as an independent risk factor.

Results: A cohort of 53 AIDS patients and 53 non-AIDS patients were identified. Both cohorts were distributed similarly based on sex (5.7% vs. 11.3% female), age (54.11 vs. 51.17 years) and obesity (1.9% vs. 1.9%). AIDS patients who underwent PSA were not at increased risk for postoperative surgical or medical complications compared to non-AIDS patients (all, $p > 0.05$) (Table 1).

Conclusions: AIDS patients who underwent PSA did not experience a higher risk of postoperative surgical or medical complications compared to non-AIDS patients. These findings should be taken into consideration for these patients prior to PSA surgery.