

<u>Session/Poster#</u>	<u>Presenter</u>
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General Anesthesia Versus Spinal Anesthesia in Syndesmosis Fixation: An ACS NSQIP Analysis 2008-2016

Introduction: Syndesmosis fixation (SF) is commonly done for syndesmotic instability after fixation of associated fractures. SF is usually done utilizing general anesthesia (GA) or spinal anesthesia (SA), however there is a lack of data supporting one over the other.

Methods: The American College of Surgeons National Surgical Quality Improvement Program database was queried via CPT codes from 2008-2016 for all SF procedures (CPT code 27829). These were then categorized into isolated GA or SA groups, and a 1:1 propensity score controlled for age and gender. Univariate analysis and multivariate logistic regression models, controlling for demographics, comorbidities, and 30-day postoperative outcomes, were used to identify GA or SA as risk factors for adverse postoperative outcomes.

Results: 3358 total patients that underwent an SF procedure between 2008-2016 were identified (73.6% GA, 3.8% SA). Using 1:1 propensity score matching, 123 patients having undergone GA or SA each were isolated. SA was associated with a significantly shorter operative time (73.36 vs. 85.37 mins, $p=0.032$). Length of hospital stay was not significantly different (2.83 vs. 2.02 days, $p=0.186$). Age, BMI, ASA class, probability of morbidity and mortality were not significantly different (all, $p>0.328$). Comorbidities were not significantly different (all, $p>0.156$).

Relative to SA, GA did not have significantly different rates of 30-day wound complications, UTIs, sepsis-related complications, readmission, and reoperation (all, $p>0.156$). Using multivariate logistic regression, GA was not an independent predictor of higher risk for postoperative complications (all, $p>0.387$).

Conclusion: No significant differences are seen in comorbidities of patients undergoing each type of anesthesia. While there was no significant difference in risk of postoperative complications, SA was associated with shorter operative times.