

Session/Poster#

Presenter

C16

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**General Anesthesia Versus Spinal Anesthesia in Tibial Shaft Repair: An ACS NSQIP Analysis 2008-2016**

Tibial shaft fractures are common injuries that require surgical intervention to repair. General and spinal anesthesia are the two most common techniques for tibial shaft repair. This study aims to compare the effectiveness and safety of general anesthesia with spinal anesthesia while taking many patient factors into consideration, such as age, sex, and comorbidities. Using the American College of Surgeons National Surgical Quality Improvement Program database, we looked at 129 patients that underwent tibial shaft repairs between 2008 and 2016 and divided the study group based on their anesthetic technique. We compared the various complications, readmissions, reoperations, mortality, and hospital stay lengths while taking into account patient comorbidities, age, and sex using a 1:1 propensity score match. Most comorbidities between anesthetic groups did not differ significantly, however, patients undergoing general anesthesia were more likely to have a bleeding disorder. Compared to spinal anesthesia, the general anesthesia group experienced significantly higher rates of 30-day wound and pulmonary complications. Additionally, general anesthesia was found to be an independent predictor of a higher risk for post-operative complications. In conclusion, general anesthesia was associated with a higher risk for bleeding that necessitated transfusion to treat. This risk may play a role when determining which type of anesthesia should be used for patients that require tibial shaft repairs.