

# General anesthesia ups knee replacement complications

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(HealthDay)—For patients undergoing total knee arthroplasty, use of general anesthesia is associated with a significant increase in complications compared with spinal anesthesia, according to a study published in the Feb. 6 issue of *The Journal of Bone & Joint Surgery*.

Andrew J. Pugely, M.D., from the University of Iowa in Iowa City, and colleagues utilized data from the American College of Surgeons National Surgical Quality Improvement Program database to identify 14,052 patients who underwent primary total [knee arthroplasty](#) from 2005 to 2010. Thirty-day complications were then noted.

The researchers found that 42.9 percent of patients underwent spinal

anesthesia and 57.1 percent underwent [general anesthesia](#). For the spinal anesthesia group, the unadjusted frequency of superficial wound infections was significantly lower, and there were significantly fewer blood transfusions and overall complications compared with the general anesthesia group. The spinal anesthesia group also had a significantly shorter length of surgery and length of hospital stay. The overall likelihood of complications was significantly higher with general anesthesia, after adjustment for potential confounders (odds ratio, 1.129). The difference between the groups in the short-term complication rate was largest for patients with the highest number of preoperative complications. Independent risk factors for short-term complication after total knee arthroplasty included age, female sex, black race, elevated creatinine, American Society of Anesthesiologists class, operative time, and choice of anesthetic.

"In summary, these results indicate that patients undergoing total knee arthroplasty who receive spinal anesthesia have a significantly decreased risk of complications compared with patients who receive general anesthesia," the authors write.

**More information:** [Abstract](#)  
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