

# Safety of tranexamic acid studied for orthopedic surgery in high-risk patients

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(HealthDay)—Tranexamic acid is not associated with an increased risk for complications in high-risk patients undergoing hip and knee arthroplasty, according to a study published in the April issue of *Anesthesiology*.

Jashvant Poeran, M.D., Ph.D., from the Icahn School of Medicine at Mount Sinai in New York City, and colleagues used Premier Healthcare claims (2013 to 2016) to identify 765,011 total hip/knee arthroplasties. The safety of tranexamic acid use was evaluated in patients with preexisting comorbidities. Risk was categorized by comorbidity: Group I had a history of venous thromboembolism, [myocardial infarction](#), seizures, or [ischemic stroke](#)/transient ischemic attack (27,890 patients); group II had renal disease (44,608 patients); and group III had atrial fibrillation (45,952 patients).

The researchers found that 52.9 percent of patients received tranexamic acid, with similar frequencies across high-risk groups I (46.6

percent), II (50.3 percent), and III (48.7 percent).

There was an association noted between tranexamic acid use and decreased odds of blood transfusion in high-risk groups I (adjusted odds ratio [aOR], 0.307; 99.9 percent confidence interval [CI], 0.258 to 0.366), group II (aOR, 0.315; 99.9 percent CI, 0.263 to 0.378), and group III (aOR, 0.321; 99.9 percent CI, 0.266 to 0.389).

Furthermore, there was no increased odds of composite complications in high-risk group I (aOR, 0.89; 99.9 percent CI, 0.49 to 1.59), group II (aOR, 0.98; 99.9 percent CI, 0.58 to 1.67), or group III (aOR, 0.93; 99.9 percent CI, 0.54 to 1.61).

"This is an important clinical conundrum that keeps on coming up as we are aware of the effectiveness of tranexamic acid, but there is not that much data out there on the safety of using [tranexamic acid in high-risk patients](#)," a coauthor said in a statement. "Our results will help anesthesiologists and surgeons in their clinical decision making."

**More information:** [Abstract/Full Text \(subscription or payment may be required\)](#)

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