

Assessing Anesthetic Collaboration between Surgeons and Anesthesiologists

Salvador Aguirre, B.S.¹, Alexandra Brown, Ph.D.², Julie A. Broski, Ph.D., MAED², Dorothy Hughes, Ph.D., MHSA³, Tyler G. Hughes, M.D., FACS⁴, Erin Plaza, M.D.², Luke V. Selby, M.D., M.S., FACS²

¹University of Kansas School of Medicine-Kansas City, Kansas City, KS

²University of Kansas Medical Center, Kansas City, KS, Department of Surgery

³University of Kansas School of Medicine-Salina, Salina, KS, Department of Population Health

⁴University of Kansas School of Medicine-Salina, Salina, KS, Department of Surgery

Received Aug. 21, 2024; Accepted for publication Aug. 26, 2024; Published online Aug. 27, 2024

<https://doi.org/10.17161/kjm.voll7.22664>

Introduction. Surgeon-anesthesiologist collaboration is essential to the safe performance of surgery, but little research has investigated this interdisciplinary collaboration. Hypothesizing that surgeons were hesitant to collaborate on topics outside their training, we surveyed surgeons to assess their knowledge of anesthesia and their comfort with this interdisciplinary collaboration, including asking about comfort discussing methods of delivering general anesthesia. One safe method, total intravenous anesthesia (TIVA), is associated with improved short- and long-term patient outcomes and is under-utilized in general practice.

Methods. Following IRB approval, we surveyed members of the American College of Surgeons Communities. Using Likert scales (1: Not at all comfortable; 5: Very comfortable), surgeons self-reported their comfort in discussing specific anesthetic considerations applicable to a broad range of procedures and practice types and assessed knowledge of general anesthesia approaches. Informed consent was obtained from all participants. Summary statistics were produced to describe responses for each question.

Results. In total, 150 surgeons were surveyed. Comfort levels varied across topics: epidural catheter placement vs. spinal anesthesia (Mean: 4.36; Median: 5), peripheral nerve blocks (Mean: 4.43; Median: 5), arterial (Mean: 4.50; Median: 5), and central venous access (Mean: 4.54; Median: 5) but were generally high. Despite surgeons' high comfort levels with focused collaboration, surgeons reported discomfort discussing TIVA vs. volatile anesthesia (Mean: 3.58; Median: 4).

Conclusions. Overall, surgeons are very comfortable collaborating with anesthesiologists on focused anesthetic decisions. However, they are less familiar with, and less comfortable discussing, differing approaches to delivering general anesthesia. Improved patient outcomes associated with TIVA adoption likely remain out of reach until surgeon comfort discussing this topic increases.