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## Commentary: X-ray vision, a superpower against postoperative pain?

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In the current issue of the *Journal*, Schmeihil and colleagues<sup>1</sup> report the results of a single-center retrospective review of fluoroscopically guided thoracic epidural (fTEA) analgesia in patients undergoing congenital cardiac surgery. The primary aim was to demonstrate successful thoracic epidural catheter placement using fluoroscopy. The authors postulate that incorporating fTEA confirmed with an epidurogram after placement improves safety and efficacy. This is supported by the fact that 119 of 120 patients underwent successful placement without complications. Additional outcome measures reported included duration of intubation and hospital length of stay, but no comparative data or pain related measures of efficacy were included.

Neuraxial and regional anesthesia have been identified as key components of Enhanced Recovery After Surgery (ERAS) protocols, including following cardiac surgery. These adjuvants are purported to reduce opioid requirements, leading to improved outcomes and resource use. Epidural and paravertebral blocks have been most frequently studied; however, emerging non-neuraxial truncal regional anesthetic techniques, including pectointercostal fascial blocks and erector spinae plane blocks, may offer similar analgesic benefits with reduced complication potential, especially in the setting of systemic anticoagulation.<sup>2-6</sup>

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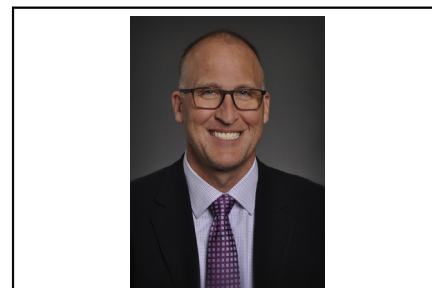
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### CENTRAL MESSAGE

Fluoroscopic confirmation of proper thoracic epidural placement may augment the safety and utility of this regional anesthetic technique in congenital cardiac surgery.

This reduced risk profile underscores the need to demonstrate a benefit to patients rather than merely reporting the absence of adverse events.

To truly evaluate the efficacy of fTEA in this setting, comparative studies incorporating pain-associated outcome measures are required. It is noteworthy that analyses of regional versus general anesthesia in adults and children have yielded conflicting data, with many newer studies failing to demonstrate an outcome benefit.<sup>7,8</sup> This highlights that ultimately the type of anesthetic technique employed may be less important than making sure that it is done well, as Schmeihil and colleagues have done in this study.

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