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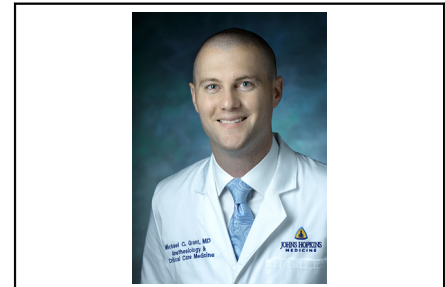


Commentary: Better late than never to optimize pain management in cardiac surgery

Michael C. Grant, MD, MSE

Pain management is a vital component of perioperative care for the cardiac surgical patient. Studies suggest that the overwhelming majority of patients routinely experience moderate-to-severe pain with cough or movement following cardiac surgery, and adequacy of pain management represents one of the few potentially modifiable risk factors that predict one's health care quality of life following cardiac surgery.^{1,2} Despite the fast-track cardiac surgery era, which reduced the magnitude of opioids administered for cardiac surgery,³ opioids generally remain the primary agents to combat perioperative pain. Unfortunately, cardiac surgery continues to exhibit an overreliance on opioids. As many as one third of patients who undergo cardiac surgical experience an opioid-related adverse event during their hospitalization, and 5% to 15% of otherwise opioid-naïve cardiac surgical patients continue to use opioids 3 months following surgery.⁴⁻⁶

It is in this context that we highlight the manuscript published by Loria and colleagues⁷ in *JTCVS Open*. The results of the before–after study showed that opioid administration was markedly reduced in the initial 5 days following surgery as part of a clinical improvement project where they implement a multimodal analgesia regimen in conjunction with their institutional Enhanced Recovery After Surgery program. The authors emphasize that opioids were not expressly withheld but given for rescue analgesia when pain remained uncontrolled after a number of other classes of medications were provided. This strategy prevented



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CENTRAL MESSAGE

Despite its delayed adoption to the cardiac surgical setting, opioid-sparing pain management should be a core tenet of perioperative care.

certain opioid-tolerant patients, such as those with a history of intravenous drug use, from experiencing symptoms of acute opioid withdrawal as a byproduct of good intention. Providers ultimately partnered with their patients in managing pain, underscored by the favorable results of a pre-discharge pain management survey showing only 2.5% of patients were “dissatisfied” with their pain control despite a 50% overall reduction in opioids. These results, although not novel in the noncardiac setting, are laudable in the cardiac surgical one, where providers have been slow to adopt certain basic tenets of pain management with limited exception.^{8,9}

There are, however, opportunities for additional advancement. Notably absent from the reported results were functional pain scores, data specific to opioid-related adverse events, including somnolence, nausea/vomiting, or certain respiratory events, opioid tolerance beyond intravenous drug use or evidence of reduced opioids on discharge or at 90 days following surgery. Any or all of these would have punctuated the clinical importance of a strategy that was designed to both optimize pain management and reduce the consequences of excessive opioid administration. Whereas before–after study design is appropriate for well-established best practice, there is still ongoing debate regarding the efficacy/risk balance of certain medications (ie, gabapentinoids, nonsteroidal anti-inflammatory agents), and pragmatic trial design would simultaneously characterize the protocols with greatest efficacy and guard against inherent bias. Yet, while we look to the future to

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continue to improve research and clinical application of perioperative best practice, the present study still suggests that it is better late than never to optimize pain in the cardiac surgical setting.

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