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# The American Journal of Surgery

journal homepage: www.americanjournalofsurgery.com



### **Invited Commentary**

## Persistent opioid use after colon and rectal surgery: Who's at risk?



Opioid use in the United States is at an all-time high, there is some evidence that postoperative narcotic contributes to this and as a result could be a good target for intervention. In this multicenter retrospective chart review of patients undergoing colorectal surgery authors ask a timely and important question by trying to figure out what risk factors might put a patient at risk for persistent opioid use after surgery.<sup>2</sup> The study found that patients in the high inpatient opioid use group (≥250 MMEs) were more likely to be young (less than 65 years old), have various comorbidities, inflammatory bowel disease, have had an emergent surgery, a dirty wound classification, were more likely to have had a stoma as well as more likely to have had complications and epidural anesthesia. Unsurprisingly, this study demonstrates a correlation between increased inpatient use and incidence of persistent use. The incidence of new persistent opioid use in this population was 12.2% and persistent use was more common in opioid non-naïve patients as well as patients with comorbidities, emergent surgery, and postoperative complications. These findings back up much of the current literature.

Pre-operative opioid use and liberal post-operative opioid prescription have previously been shown to increase the risk of persistent post-operative opioid use, <sup>3-6</sup> however, in depth analyses of the patient specific and peri-operative risk factors associated with persistent post-operative use is scarce but important. With a high percent of patients undergoing elective surgery receiving opioids during their hospitalization, this study provides important insight on the relationship between the extent of inpatient opioid administration and risk of persistent post-operative use. Though there are some hypotheses in the literature regarding the causes of the observed trend in increased persistent opioid use in patients who received higher doses of opioids in the peri-operative period, there is no definitive consensus on whether patients who received more opioids had increased pain and therefore required more opioids or if they received more opioids and therefore had a harder time managing perioperative pain due to tolerance issues.

While this study cannot demonstrate causation, it does give us some data on patient characteristics that are associated with persistent post-operative use. This may help us to identify those patients who are at higher risk for prolonged use and help us to target those

who may need an opioid sparing alternative pain control plan, or at least know those patients who are higher risk. Potentially we could work with our anesthetic colleagues to develop opioid sparing pain control methods. The study is not without limitations due to its retrospective nature, but it does help us begin the conversation of how to target those at risk. Future studies should evaluate prospectively some of these associations and pilot some potential interventions in these high risk patient populations.

#### **Declaration of competing interest**

I have no financial or research related conflicts of interest.

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14 September 2020