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Commentary: Opioid reduction in lung cancer surgery: Important for reasons that may surprise you

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Enhanced Recovery after Surgery (ERAS) is oriented to helping patients feel like a person rather than a patient as soon as possible after surgery, achieving homeostasis in terms of oral intake, removal of tubes, normalization of fluid status, temperature, and minimizing opioids. For most of us implementing ERAS programs, opioid reduction has been a distant secondary goal. Opioids are known to cause short-term side effects, and avoiding them makes sense as a goal in line with ERAS. There has been increased awareness about opioid flow into the community, and that surgeons are partially responsible for this. There has been a valiant effort to curb overprescribing, and patients are more and more aware of the possibility of developing opioid dependence in conjunction with a surgical procedure. What is less well known is the interplay between opioids and cancer growth.

Lung cancer cells have been demonstrated to express mu opioid receptors that link to various cellular growth pathways.¹ Opioid use has been linked to lung cancer growth, progression, and ability to metastasize. Clinical data have identified an independent association of opioid exposure postoperatively to worse survival, higher rates of recurrence.²⁻⁵ It may also affect the tumor microenvironment, with an immunosuppressive effect that has the potential to interfere with efficacy of checkpoint inhibitors.

Kodia and colleagues⁶ demonstrate how an iterative approach to Enhanced Recovery Pathways in thoracic

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CENTRAL MESSAGE Opioid reduction in cancer surgery is more critical than most of us realize, for unexpected reasons.

surgery can continue to yield meaningful improvements in patient outcomes. Adjustments in the protocol for regional blockade, as well as the change in delivery of oral opioids to "as needed" instead of scheduled, and tramadol instead of oxycodone has resulted in substantially lower in- and out-of hospital opioid use. There is a growing trend in reporting opioid reduction as a primary goal of Enhanced Recovery Pathways, which should be applauded for the reasons described above.

It is also laudable that Kodia and colleagues⁶ were able to track outpatient opioid use with Florida state prescription monitoring data. I congratulate both the authors as well as Florida state officials for making this possible.⁷ This information is crucial to determining the magnitude of the problem of physician-prescribed opioids after surgical procedures, and how quality improvement protocols are, or are not, influencing efforts in reducing opioid flow into the community. Many states strictly prohibit access to these prescription drug monitoring programs for research purposes and only release data in relation to real-time individual prescriptions. I urge the medical community to push our state governments to change this.

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