Reviewer’s report

Title: Postoperative Opioid Requirements of Patients Receiving Sublingual Buprenorphine-Naloxone: A Case Series

Version: 0 Date: 27 Dec 2018

Reviewer: Daniel Barry Carr

Reviewer's report:

This report is a case series of 24-hour postoperative opioid requirements and peak pain intensity scores in patients presenting for diverse operations and who had received buprenorphine-naloxone (Suboxone) within 30 days before undergoing surgery. It appears to be a convenience sample drawn from data captured in one quaternary medical center from 2005-2016; it is not clear to this reviewer whether the authors view their case finding method as capturing all relevant cases.

At a time when many clinicians are facing an increasing need for data upon which to base management decisions for increasing numbers of patients presenting for surgery while taking Suboxone, the data presented are of great current interest. The manuscript is clear and well-written.

On the other hand, the use of essentially historical controls from a European sample may be questioned, given that there may be differences in premedication, dose of Suboxone employed, relative proportions of different types of operation, patient expectations and education, or intraoperative surgical and anesthetic technique between North America and Europe. It would seem more internally valid to compare opioid requirements for patients treated at the same institution, but differing with respect to recent Suboxone exposure. The European data could be mentioned briefly in the Discussion but the statistical comparisons would be based upon patients observed only in the authors' institution, matched according to the type of surgical procedure.

It was helpful for this reviewer to see in the case report presented within the box, and in the footnote to Table 2, the components of the multimodal management approach provided for that patient (e.g., coadministration of ketamine). The authors themselves suggest (bottom of page 10 to top of page 11) that multimodal therapy may benefit this patient cohort. If feasible, could the different types of operation be presented along with typical components of the perioperative multimodal regimen including relevant anesthetic management? Providing such information would help place the findings in context, e.g., if nonopioid adjuvants were little used for one type of operation during the earlier years of observation, and unimodal pain relief with opioids was the standard of care, then one might expect to see greater postoperative opioid consumption after Suboxone exposure in patients observed during the earlier years. Similarly, if one had a sense of whether the same operation was more likely to be performed using a minimally invasive technique in later years, this might be of interest. Finally, the authors present data as to whether a pain consultation was requested but one wonders what the threshold was for obtaining such a consult, whether the requests were filed preoperatively and expectantly, or only after postoperative pain proved difficult to control. This reviewer recognizes the
extra work required to address these suggestions, and accepts it may not be feasible to do so, but offers them so as to increase the impact of this case series at a time when clinicians are still looking to expand the published clinical experience such as presented herein.

On page 5, line 56, shouldn't the NRS be 0-10 not 1-10? Another minor question is whether the more current term "PACU" should be used in place of "RR".

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

No

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
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I am able to assess the statistics

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