

## Validation of a New “Objective Pain Score” vs. “Numeric Rating Scale” For the Evaluation of Acute Pain: A Comparative Study

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### Dear Editor,

We read with interest the article by Tandon and colleagues (1), entitled “Validation of a New ‘Objective Pain Score’ Vs. ‘Numeric Rating Scale’ For the Evaluation of Acute Pain: A Comparative Study”, published in *Anesthesiology and Pain Medicine*. Tandon et al. reason that although a numeric rating scale (NRS) is widely used, it requires abstract thinking by each patient, and the interpretation of reflected pain severity can, therefore, be biased. They studied the validity of a new 4-point objective pain score (OPS) in the evaluation of acute postoperative pain by comparing with the numeric rating scale (NRS) in 93 patients who underwent laparotomy. Patient-controlled analgesia was used for postoperative pain control. The authors found the NRS and OPS generally agreed across ranges of pain. Tandon et al. conclude that OPS is a good stand-alone pain score and is better than the NRS for defining mild and moderate pain. They further suggest that OPS may even be used to supplement NRS when it is indicative of mild or moderate pain (1).

We would like to commend the creative and insightful work by Tandon and colleagues. We agree with the authors that acute post-operative pain should ideally be assessed simultaneously at rest and during movement. We also agree with the authors on the limitation of NRS, since these scores in different patients could potentially mean different degrees of pain, while each OPS score signifies a similar degree of pain. However, we wonder how OPS may perform, in contrast to NRS, on those patients who experience moderate to severe pain or severe postoperative pain, e.g., following more complex abdominal surgeries, such as bowel resection, gastric surgery, and hepatopancreatic surgery?

For example, a postoperative NRS of 5/10 of a typical patient may need slight medication titration, while that of 9/10 may warrant much more aggressive workup and

therapeutic interventions. However, the OPS scale may not reflect the difference between these scenarios. We speculate that the OPS metric may not be able to provide such pertinent information in more challenging or problematic postoperative pain cases. To this end, we speculate that OPS may need to be used in conjunction with NRS in patients with moderate to severe postoperative pain, contrary to what Tandon et al. have suggested.

Recently, Tighe et al. (2) conducted a retrospective cohort study of surgical case data from 7,293 adult patients to examine the impact of age, gender, and the type of surgery on the time to onset of sustained postoperative pain relief (SuPPR), defined as the time required until a patient reports the first of multiple (2, 3, 4, or 5 sequential measurements; e.g., SuPPR-2, SuPPR-3, etc.), uninterrupted, mild pain scores ( $\leq 4/10$ ). Tighe et al. advocate using SuPPR as a novel way to evaluate “acute pain service performance”. It seems both OPS and SuPPR focus more toward the end of “pain free or pain relief”. We believe SuPPR also has the limitation of excluding patients who reported NRS  $> 4/10$ , as SuPPR only document postoperative pain  $\leq 4/10$ . Therefore, SuPPR cannot be used alone as a postoperative pain control metric in acute pain care, especially in those who present with more complex and difficult cases in controlling their pain (3).

Further, Tighe and colleagues still need to use NRS to achieve the status of SuPPR, although the data were collected differently. In comparison to NRS, OPS seems to represent a novel and less subjective way of assessing postoperative acute pain following laparotomy. However, can we comfortably call it “Objective Pain Scale”, without causing significant confusion to lay people or professionals, in view of the hard-instilled and widely accepted notion that pain is always subjective?

## Footnotes

**Authors' Contribution:** Each author contributed to the writing of this brief letter to the editor.

**Conflict of Interest:** None.

## References

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