Role of an epidural in laparoscopic surgeries

Dear Editor,

We read with great interest the research article on the evaluation of the role of epidural in laparoscopic abdominal procedures^[1] and wish to add a few more insights.

Jayadevan *et al.*^[1] mentioned in the "Introduction" section that the efficiency of epidural analgesia has been established as an enhanced recovery after surgery (ERAS) guideline and cited a study by Pöpping *et al.*^[2] However, Pöpping *et al.*^[2] included many varieties of surgeries but not laparoscopic abdominal procedures without mentioning ERAS.^[2] Furthermore, Jayadevan *et al.*^[1] stated that the beneficial effects of an epidural have "proponents for and against" and cited two references that are again absolutely mismatched. Guay *et al.*^[3] included only open abdominal surgeries and observed a high quality of evidence for the return of gastrointestinal function with epidural analgesia. While Yanagimoto *et al.*^[4] included laparoscopic gastrectomies, they too observed only the beneficial effects of epidural.

While we agree that blinding was not possible in that study,^[1] it should have been mentioned under "Limitations". Moreover, to make the blinding possible, continuous erector spinae plane block or para vertebral block could have been included.

The lack of beneficial effect of epidural on the return of bowel function in that study^[1] could be due to the different criteria adopted or because of laparoscopic approach *per se*.

To conclude, alpha 2 agonists, magnesium sulphate, etc., are adequate to control the stress responses of pneumoperitoneum. An epidural can be applied either before or at the end of the surgery for patients who had an anticipated or unanticipated conversion, respectively.

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Conflicts of interest

There are no conflicts of interest.

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References

- Jayadevan D, Kumar L, Varghese R, Balakrishnan S, Shyamsundar P, Kesavan R. Evaluation of analgesic effects and hemodynamic responses of epidural ropivacaine in laparoscopic abdominal surgeries: Randomised controlled trial. J Anaesthesiol Clin Pharmacol 2022;38:245-51.
- 2. Pöpping DM, Elia N, Van Aken HK, Marret E, Schug SA, Kranke P, *et al.* Impact of epidural analgesia on mortality and morbidity after surgery: Systematic review and metaanalysis of randomized controlled trials. Ann Surg 2014;259:1056-67.
- Guay J, Nishimori M, Kopp S. Epidural local anaesthetics versus opioid based analgesic regimens for postoperative gastrointestinal paralysis, vomiting, and pain after abdominal surgery. Cochrane Database Syst Rev 2016;7:CD001893. doi: 10.1002/14651858. CD001893.pub2.
- Yanagimoto Y, Takiguchi S, Miyazaki Y, Mikami J, Makino T, Takahashi T, *et al.* Comparison of pain management after laparoscopic distal gastrectomy with and without epidural analgesia. Surg Today 2016;46:229-34.

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