



## Oral acetaminophen and patient-controlled epidural analgesia

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To the Editor:

By a randomized controlled trial, Panghal et al. [1] assessed adjuvant effects of oral acetaminophen on patient-controlled epidural labor analgesia (PCELA). To discern the real effect of one factor on primary outcome in a randomized controlled trial, however, all of other possible confounders must be standardized to avoid potential bias. We noted that acetaminophen was orally administered 45 min before the procedure. It was unclear how the initiation of epidural labor analgesia was determined during this study. The onset time of oral acetaminophen is 30 min and at least 60 min are needed for maximum effect. Given that labor pain is an acute pain and oral acetaminophen has a slow onset time, we argue that appropriate time of oral acetaminophen administration should be an important part of study design for achieving best effect of combined PCELA. Other than PCELA, 0.5 mL of 0.5% hyperbaric bupivacaine was also given intrathecally. However, readers were not provided whether two groups were comparable with respect to the effect of intrathecal block. In addition, total number of boluses consumed was significantly decreased in the acetaminophen group. We would like to know whether all patients were provided same instructions regarding injection of drugs via the PCELA pump.

Finally, median durations of labor were about 5 h. However, the details of the dynamic changes of VAS pain scores and drug consumptions during the PCELA in the two groups were not provided. Thus, we cannot determine whether adjuvant effect of oral acetaminophen on PCELA has a time-dependent characteristic.

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### Declarations

**Conflict of interest** None declared.

### Reference

1. Panghal R, Mitra S, Singh J, Sarna R, Goel B. Oral acetaminophen as an adjunct to continuous epidural infusion and patient-controlled epidural analgesia in laboring parturients: a randomized controlled trial. *J Anesth*. 2021. <https://doi.org/10.1007/s00540-021-02975-z>.

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