# **Letter to Editor**

# Sole Epidural, a Misnomer

Sir

I have read the article titled "Sole epidural: A unique drug combination for abdominal and orthopedic/lower limb surgeries" published in the April–June issue in 2015. The references quoted in the introduction for the need of the study are a decade older, as an overview of the Cochrane systemic reviews done in 2014 is available.<sup>[1]</sup>

As the authors say, it is a retrospective analysis followed by prospective data collection. The number of patients included were not mentioned anywhere in the article. Similarly, out of two outcome measures "ease of patient positioning" as mentioned in the materials and methods section was not defined throughout the article. The unique drug combination, which was used for the study includes epinephrine. However, the concentration used is nowhere mentioned in the article including the laboratory analysis report. As far as the demographic data are concerned, the details of the American Society of Anesthesiologists (ASA) grade of the patients, which is crucial was once again omitted. The reconfirmation of epidural space with a 2-mL syringe did not sound evidence-based. The "suitable volume" injected was not scientifically defined and it was the same for the rate of injection of the volume into the epidural space. It was quite surprising that no test dose was used prior to bolus administration. [2,3] The time interval at which the sedative drugs were used was again not mentioned in the article. On the contrary, patient safety was jeopardized by the steps taken in case of difficult catheter insertion or inadvertent dural puncture. Patients undergoing different surgical procedures including laparoscopies were included, which would have definitely influenced the outcome of the study as anesthetic needs are different in each category.

In laboratory analysis the concentration of epinephrine was not included, which in my view is a significant omission. The alkalinization of bupivacaine will only increase the precipitation of the drug as we all know. Baricity does not have any role in epidural space as it is a potential space and not fluidic.

One patient had developed hypertension crisis and seizures during the procedure, which was nothing but local anesthetic systemic toxicity not recognized by the author. Conversion to general anesthesia was 0.6% in obstetrics and gynecology cases which is very good but when comparing with the

quoted reference article, the numbers were manipulated. The rates were 0.8% and 4.9% in the reference article and not 5–13%. [4] Again, both the studies cannot be compared because the reference article was on caesarean section patients only.

In my view, the study appears to be incomplete in methodology. Though the epidural is a technique of choice, the technique employed by the authors compromises patient safety.

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#### **Conflicts of interest**

There are no conflicts of interest.

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