



# Invited Response: Bilateral Erector Spinae Block Has Postoperative Analgesic Effect for Breast Reduction Surgery

Gözen Öksüz<sup>1</sup> · Fatma Bilgen<sup>2</sup> 



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To the editor,

First of all, we would like to thank the authors for their comments contributing to our paper [1, 2]. Although different opinions are available as to the action mechanism of the erector spinae block, there are papers mentioning epidural dispersion. Çelik et al. reported that local anesthetic was spread transforaminal and epidural space in a patient undergoing Unilateral ESB with magnetic resonance imaging study (MRI) [3]. Also, Tulgar et al. have implemented ESB unilaterally at the T9 level for open nephrectomy surgery and reported sensory block in T6–T11 dermatomes on the same side and unexpectedly in T9–T10 dermatomes on the opposite side. The sensory block on the other side might be due to epidural dispersion [4]. The authors have mentioned cases to which bilateral

erector spinae block was applied and analgesia was achieved successfully, and reported that epidural dispersion was more probable when bilateral ESB was performed [1]. In our comparative study of bilateral ESB and tumescent anesthesia, we achieved effective analgesia in patients undergoing ESB. Although we agree with the authors that epidural dispersion is more possible in the bilateral block but it might not exhibit similar dispersion and effect in all patients. In our study, one patient undergoing ESB showed successful block on one side but failed on the other side and therefore was excluded from the study [2]. Contralateral involvement might either be less than the level of sufficient sensory dermatomes or might be totally absent. We believe that the epidural dispersion of local anesthetic used in ESB might depend on the volume and application speed of local anesthetic as well as on patient-related factors [3]. Although there are sufficient studies showing the analgesic effect of ESB, understanding the dispersion and block mechanism of local anesthetic requires further studies to be conducted [5]. ESB will continue to be discussed as the new favorite of regional anesthesia.

## Compliance with Ethical Standards

**Conflict of interest** The authors declare that they have no conflict of interest to disclose.

**Ethical Approval** This article does not contain any studies with human participants or animals performed by any of the authors.

**Informed Consent** For this type of study, informed consent is not required.

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✉ Fatma Bilgen  
fatmabilgen81@gmail.com  
Gözen Öksüz  
gozencoskun@gmail.com

<sup>1</sup> Department of Anesthesiology, Sutcu Imam University Hospital, University of Kahramanmaraş Sutcu Imam, Avsar Yerleskesi, 46100 Kahramanmaraş, Turkey

<sup>2</sup> Department of Plastic Surgery, Sutcu Imam University Hospital, University of Kahramanmaraş Sutcu Imam, Avsar Yerleskesi, 46100 Kahramanmaraş, Turkey

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