



## Reply to the letter to the editor

Hyun-Kyu Yoon<sup>1</sup> · Seokha Yoo<sup>1</sup> · Won Ho Kim<sup>1</sup>

Received: 25 January 2019 / Accepted: 26 January 2019 / Published online: 9 March 2019  
© Japanese Society of Anesthesiologists 2019

**Keywords** Catheter-related bladder discomfort · Network · Meta-analysis

To the Editor:

We are grateful to the authors for the thoughtful comments on our manuscript [1]. We agree with opinion that spinal anesthesia itself could decrease the incidence of catheter-related bladder discomfort (CRBD) postoperatively through residual spinal analgesic effect. Spinal anesthesia should be preferred to general anesthesia if possible. However, the incidence of CRBD at 24 h after surgery could be up to 84% [2] and the incidence at 72 h after surgery could still be as high as 48% [3] after transurethral resection of bladder tumor. This means that the residual analgesic effect of spinal anesthesia could not fully relieve the postoperative CRBD.

Network meta-analysis is a useful tool to facilitate estimation of the comparative efficacy and tolerability of multiple interventions even when they have not been investigated head-to-head in randomized trials. Compared to the standard pairwise meta-analysis, the precision of estimate could be increased. In addition, the limitation of our network meta-analysis of small number of studies and heterogeneity of studies should be acknowledged and more well-designed head-to-head randomized trials are required.

### Compliance with Ethical Standards

**Conflict of interest** No competing interest declared.

### References

1. Hur M, Park SK, Yoon HK, Yoo S, Lee HC, Kim WH, Kim JT, Ku JH, Bahk JH. Comparative effectiveness of interventions for managing postoperative catheter-related bladder discomfort: a systematic review and network meta-analysis. *J Anesth*. 2019. <https://doi.org/10.1007/s00540-018-2597-2>.
2. Bala I, Bharti N, Chaubey VK, Mandal AK. Efficacy of gabapentin for prevention of postoperative catheter-related bladder discomfort in patients undergoing transurethral resection of bladder tumor. *Urology*. 2012;79:853–7.
3. Zhang Z, Cao Z, Xu C, Wang H, Zhang C, Pan A, Wei R, Peng S, Guo F, Wang L, Sun Y. Solifenacin is able to improve the irritative symptoms after transurethral resection of bladder tumors. *Urology*. 2014;84:117–21.

**Publisher's Note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

---

This reply refers to the comment available online at <https://doi.org/10.1007/s00540-019-02619-3>.

---

✉ Won Ho Kim  
wonhokim.ane@gmail.com

<sup>1</sup> Department of Anesthesiology and Pain Medicine, Seoul National University Hospital, Seoul National University College of Medicine, 101 Daehak-ro, Jongno-gu, Seoul 03080, Republic of Korea