

# Continuous Adductor Canal Block Compared to Epidural Anesthesia for Total Knee Arthroplasty [Letter]

Xiaomin Li, Chaolu Wang

Wangjing Hospital, China Academy of Chinese Medical Sciences, Beijing, 100102, People's Republic of China

Correspondence: Chaolu Wang, Wangjing Hospital, China Academy of Chinese Medical Sciences, Doctoral Supervisor, Email 1769932834@qq.com

## Dear editor

I have perused the article “Continuous Adductor Canal Block Compared to Epidural Anesthesia for Total Knee Arthroplasty” authored by Freedman et al.<sup>1</sup> This study zeroes in on the analgesic regimens following total knee arthroplasty (TKA), comparing the efficacies of continuous adductor canal block (cACB) with epidural analgesia (EA), which holds certain significance for clinical practice. The substantial sample size of this study bolsters the representativeness and reliability of the research findings. Moreover, the study has amassed multiple indicators of the patients, thereby conducting a comprehensive assessment of the impacts of different analgesic regimens, rendering the research conclusions more compelling. Nevertheless, we do have some suggestions and queries to put forward.

In actual clinical treatment, the pain following TKA is influenced by a multiplicity of factors.<sup>2–4</sup> In this study, the evaluation of pain control solely hinges on the consumption of opioid drugs, without taking into account other factors such as psychological support, anxiety, and depressive states, nor has it mentioned the utilization of standardized pain assessment tools like the Visual Analogue Scale (VAS). The dearth of standardized assessment might lead to an imprecise evaluation of the analgesic effect, failing to accurately mirror the disparities in pain control among different analgesic methods. Additionally, regarding the implementation of cACB, technical details such as the injection site, depth, and the accuracy of catheter placement have not been elaborated upon. These factors could potentially affect the efficacy of nerve block, thereby influencing the comparability of the research results. Different operative techniques might result in varying extents of nerve block range and duration, thus exerting an impact on the analgesic effect and other outcomes. The study has predominantly focused on the short-term outcome indicators after surgery. However, the rehabilitation of TKA patients is a long-drawn process, and the long-term pain relief, functional recovery, and the incidence of complications are equally crucial. The short-term results are incapable of comprehensively reflecting the impacts of different analgesic regimens on the long-term prognosis of the patients.<sup>5</sup> With regard to the classification and analysis of postoperative adverse events, although the primary and secondary adverse events have been distinguished, the causes of some specific complications (such as the lower incidence of venous thromboembolism (VTE) in the cACB group) have not been delved into. Whether it is due to the direct influence of the analgesic modality on the hemodynamics or coagulation function or the indirect reduction of the VTE risk as a result of the earlier ambulation of the patients in the cACB group, the study fails to provide a clear explanation.

This study has furnished valuable information in the realm of analgesia after TKA. It is hoped that the authors could take these limiting factors into consideration in their subsequent research, thereby furnishing more reliable evidence for clinical practice.

Thank you for affording the opportunity to publish these comments. We look forward to witnessing more high-quality research achievements in this field.

## Disclosure

The authors declare no conflicts of interest in this communication.

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