



Comment on “Single-shot regional anesthesia for laparoscopic cholecystectomies: a systematic review and network meta-analysis”

Dear Editor,

I read with great interest the recently published systematic review and network meta-analysis [1] that assessed the efficacy of the single-shot regional anesthesia technique in laparoscopic cholecystectomy (LC). I greatly appreciate the authors' efforts and wish to present my reflections on this article.

In the Introduction section, De Cassai et al. [1] state that “many meta-analyses evaluated different regional techniques for postoperative pain and analgesia requirements in LC” and cite a few references. However, one of the referenced studies (reference #12 of De Cassai et al. [1]) did not evaluate any regional techniques or postoperative pain. This study, which was conducted by Sedaghat et al. [2], only evaluated maternal and fetal complications in LC versus open cholecystectomies.

My primary concern, however, is that the number of studies included for each regional technique (i.e., the breakup) is not provided. Moreover, even for the primary outcome (postoperative opioid consumption), only 46 of the 84 eligible studies could be included. Because the breakup was not available and, as a consequence, the number of patients included for each regional technique may be highly variable, it is not clear whether a definitive conclusion can be drawn.

The different components of pain involved in LC are also not fully clarified in this study. De Cassai et al. [1] state in the Discussion section that both visceral and somatic components of pain may occur with LC, and the postoperative analgesia should be chosen accordingly. While I agree with this, De Cassai et al. [1] subsequently contradict this statement, suggesting that, based on previous studies, visceral pain is the most important contributor, and the results of this study regarding the rectus sheath block are therefore not surprising. However, if the unfavorable results are applicable to the rectus sheath block, then how the favorable results regarding the transverse abdominis plane block can be explained that also covers only the somatic pain like the rectus sheath block? The point is further confused given that De Cassai et al. [1] state exactly the opposite in the “Introduction” section, i.e., the “primary source of pain reported for LC is incisional.”

Additionally, I strongly believe that a major limitation of this meta-analysis is that shoulder pain, which is also an important compo-

nent of pain after LC, was not included as an outcome. This is despite the fact that shoulder pain was assessed by many of the studies included in the meta-analysis. Shoulder pain occurs frequently following LC, with an incidence of 31%–80%. Although the intensity of pain is usually mild and only lasts for 1 to 2 days, in some patients it can cause more discomfort than incisional pain and can last longer, even up to a few weeks [3]. Trocar site infiltration or intraperitoneal instillation significantly reduces shoulder pain compared to controls [4].

In conclusion, I believe that somatic, visceral, and shoulder pain (triad) are important components of pain after LC and the regional technique used should therefore focus on all three factors.

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Received: February 26, 2023; **Revised:** August 10, 2023; **Accepted:** August 13, 2023

Funding: None.

Conflicts of Interest: No potential conflict of interest relevant to this article was reported.

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Korean J Anesthesiol 2024;77(1):164
<https://doi.org/10.4097/kja.23143>

Online access in <http://ekja.org>