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Letter to Editor

Comment on: "Comparison of Saddle Block Anesthesia with Three Different Sitting Times in Patients Undergoing Dilation and Curettage"

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I have read with great interest the article entitled "Comparison of Saddle Block Anesthesia with Three Different Sitting Times in Patients Undergoing Dilation and Curettage" by Ghosouri et al. [1]. The authors have commendably explored the use of saddle block anesthesia for dilation and curettage (D&C) procedures; however, several core anatomical and pharmacological considerations require clarification.

The saddle block—by definition—is a restricted form of spinal anesthesia targeting sacral dermatomes (S2–S5), which provide sensory innervation to the perineum, perianal region, and medial thighs. It is well suited for perineal or anorectal interventions [2-3]. In contrast, uterine sensation is mediated by afferents originating from T10–L1 segments [4]; therefore, saddle block cannot offer adequate anesthesia for uterine curettage. Conceptually, it is not appropriate when uterine or cervical manipulation is expected.

Furthermore, the study's use of 2 mL of 0.5% bupivacaine (≈10 mg) greatly exceeds the usual dose for a true saddle block (2–3 mg) [2-3]. Such a large amount predictably spreads cephalad, producing a thoracolumbar rather than sacral block. Indeed, the authors report sensory block heights reaching T10–T12, confirming that the technique functioned as a low spinal anesthesia, not a genuine saddle block. This terminological mismatch may mislead readers regarding the physiological intent and clinical safety profile of saddle anesthesia.

According to current guidelines and evidence regarding anesthesia techniques for hysteroscopy and D&C, both the American College of Obstetricians and Gynecologists (ACOG) and the American Association of Gynecologic Laparoscopists (AAGL) endorse local anesthesia techniques—specifically paracervical block, intracervical block, and intrauterine lidocaine—as the preferred methods for office-based uterine procedures [5-6]. These approaches are supported by extensive data showing excellent efficacy, safety, and minimal complication rates compared with neuraxial blockade.

In summary, saddle block anesthesia is not recommended for D&C of the uterus because the required dermatomal levels lie above its limited sacral range. For effective and physiologically consistent anesthesia, a low spinal block targeting T10–L1 dermatomes with appropriately titrated hyperbaric bupivacaine would be suitable. Importantly, a lower dose of 6–8 mg of bupivacaine 0.5% may provide adequate anesthesia without hemodynamic instability or prolonged recovery, even with minimal sitting time after injection [7]. This careful titration minimizes adverse effects, shortens postoperative recovery, and optimizes patient throughput. While the authors' effort to study sitting times is appreciated, precise application of anatomical principles and dose selection remains essential for correct interpretation and reproducibility.

The authors declare no conflicts of interest.

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Chairman's Response to the Author:

Dear Dr. Atefeh Ghosouri, et al.

A letter has been sent to our journal by Shakeri A, Comparison of saddle block anesthesia regarding your article entitled, Atefeh H, et al. Comparison of saddle block. AACC 2025; 11(4).

published in AACC.

The letter would be published in AACC as it points to serious drawbacks in your article.

I personally agree with the points raised against your research article. They are valid and rightly discuss the core of the problem.

We are sending you the letter in case have any comments; otherwise the letter will be published in the forthcoming issue of our journal.

Zahid Hussain Khan

Chairman

Author's Reply to the Editor:

Dear Professor Zahid Hussain Khan

Chairman

We carefully read the recent Letter to the Editor commenting on our article "Comparison of Saddle Block Anesthesia with Three Different Sitting Times in Patients Undergoing Dilation and Curettage," and we would like to briefly clarify several key points.

First, regarding terminology, the correspondent states that the saddle block should be confined to the sacral dermatomes (S2–S5) and therefore, is not appropriate for uterine procedures. We fully agree that uterine pain is mediated mainly through T10–L1. In our trial, the measured sensory level in most patients was approximately T10–T12, which is exactly the range required for uterine and cervical manipulation. Thus, although one may argue that the term "low spinal" is more precise than "saddle block," this is essentially a semantic issue and does not affect the actual dermatomal distribution we documented or the clinical validity of our results.

Second, the dose of intrathecal bupivacaine (10 mg hyperbaric) was criticized as being "too high" for a saddle block. This criticism is largely based on data from perineal surgery in non-pregnant patients, which is not directly comparable to our obstetric D&C population. In our study, with patients seated for 3–5 minutes after injection, this dose produced a limited low thoracolumbar block (around T10–T12), not an extensive high thoracic block, and was associated with stable hemodynamics and no serious complications. These findings are consistent with the well-known reduction in the neuraxial local anesthetic requirement and the altered CSF dynamics observed in pregnancy.

Third, we agree that major guidelines (ACOG, AAGL, and others) recommend paracervical and related local techniques as first-line options in office-based settings for D&C and hysteroscopy. Our work, however, was performed in a tertiary operating-room environment where patients often present with significant bleeding and are managed under full anesthetic monitoring. In this context, both general anesthesia and neuraxial techniques are widely used in daily practice, and our study was designed to examine a more limited-spread spinal approach as a pragmatic alternative to general anesthesia—not to replace guideline-recommended local techniques in the office.

In summary, our randomized trial shows that:

* The sensory levels we obtained (T10–T12) are anatomically appropriate for uterine procedures;

* The intrathecal dose used, in the described sitting technique, resulted in limited spread and acceptable hemodynamic safety; and

* The main conclusion of the article—that varying sitting times between 3 and 5 minutes does not materially alter block characteristics, with a possible analgesic

advantage of 5 minutes in pregnancies beyond 15 weeks—remains unchanged.

We fully respect scientific debate over nomenclature and dosing, and we appreciate the interest shown in our work. We would also be pleased to invite the author of the Letter to the Editor to visit our obstetric anesthesia service, observe the described technique in routine clinical use, and discuss the practical aspects with our team in person. Likewise, we believe such direct observation may provide a useful, real-world perspective alongside the published data.

Thank you for considering this short reply.

Sincerely,

Atefeh Ghosouri, MD
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