LETTER TO THE EDITOR
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Letter to the Editor for the Article "Effect of Prilocaine Infiltration into the Nephrostomy Tract After Percutaneous Nephrolithotomy on Postoperative Pain"

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Dear Editor,

"Effect of Prilocaine Infiltration into the Nephrostomy Tract After Percutaneous Nephrolithotomy on Postoperative Pain" by Akdoğan et al. (1), provides valuable insights into the utility of local anesthetic infiltration for reducing postoperative pain following percutaneous nephrolithotomy (PCNL). While the study sheds light on a critical aspect of postoperative care, I would like to highlight a few points that could further refine the interpretation and generalizability of the findings.

The study states that Amplatz sheaths were used in all patients but does not specify the diameter. Increasing the diameter of the Amplatz sheath is associated with greater postoperative pain due to increased renal parenchymal stretching. Research has demonstrated that smaller Amplatz sheath sizes are associated with less postoperative discomfort, highlighting the importance of reporting this parameter (2). Clarifying the sheath diameters used could provide better context to the reported pain scores.

The duration of the PCNL procedures is not mentioned in the study. Procedural time is a well-established factor influencing postoperative pain, with prolonged surgeries typically resulting in higher pain levels. Studies have identified operation time as an independent risk factor for moderate-to-severe postoperative pain, with longer durations correlating significantly with increased pain levels (3). Including this variable would strengthen the study's analysis of pain outcomes.

The criteria for patient group allocation were not clearly defined. Specifying whether the groups were homogeneous in terms of demographic and clinical characteristics would enhance the study's methodological rigor and internal validity of the study.

The study mentions that stones were fragmented using either pneumatic lithotripsy or holmium laser energy. However, no subgroup analysis was performed to evaluate whether the type of energy source affected postoperative pain scores. As the energy source could have a significant impact on tissue trauma and, consequently, pain severity, a subgroup analysis would provide more nuanced insights into the observed pain outcomes.

It is unclear whether all surgeries were performed by the same surgeon or by surgeons with varying levels of experience. Surgical expertise can influence both complication rates and the degree of postoperative pain. Clarifying this aspect would enhance the study's reproducibility and generalizability.

It is important to note that factors such as psychiatric disorders, anxiety, alcohol use, and chronic analgesic use can influence visual analog scale (VAS) scores. This study did not explicitly mention whether these conditions were excluded, which may have introduced confounding effects (4). A discussion on the potential impact of these variables would enhance the study's findings, and future research should consider controlling for these factors to enhance the reliability of VAS-based pain assessments.

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In the original study, patients who did not receive a local anesthetic underwent both supine and prone procedures, whereas the group that received local anesthetic included only patients who underwent the prone approach. As previous studies suggest that postoperative pain levels may vary between these two positions, this discrepancy introduces a potential confounding factor that may limit the validity of direct comparisons. Acknowledging this limitation and considering uniform procedural positioning in future studies would enhance comparability and strengthen the validity of the conclusions.

In conclusion, the findings of Akdoğan et al. (1) are highly valuable in advancing our understanding of postoperative pain management in PCNL. Addressing the above points in future studies could further enhance the clinical implications and applicability of their work.

Thank you for this significant contribution to the field.

Ethics

Informed Consent: Retrospective study.

Footnotes

Conflict of Interest: No conflict of interest was declared by the author.

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