

Terminological Ambiguity in the Study on Fenoldopam and AKI

Dear Editor,

We have read with great interest the article titled “*Fenoldopam Use during Cardiopulmonary Bypass and Postoperative Rates of Acute Kidney Injury*” published in Puerto Rico Health Sciences Journal (Vol. 44, No. 1, March 2025, pp 3-8), and I appreciate the efforts authors put in discussing the association of drug fenoldopam and Acute Kidney Injury. However, I am somehow confused by the terminology used in the first sentence of the introduction of the manuscript in which they mentioned that it was a ‘study of adults,’ yet the study population includes patients aged $70.2(\pm 7.6)$ years.

In the context of medicine and research, ‘adults’ generally refers to individuals above the age of 18 but categorizing patients around 70 in adults without further stratification could lead to confusion. Older adults have different physiological and clinical considerations as compared to the younger adults, which might change the outcomes of the study. Could the authors clarify whether their use of the adults means to include all the age groups uniformly or if there were specific age groups in data analysis?

Sincerely,

Shahzaib Shahzaib, Gujranwala Medical College, Pakistan;
Khursheed Ahmed, Bolan Medical College, Pakistan;
Arifa Arifa, Bolan Medical College, Pakistan

REPLY: Inquiry Regarding Age Categorization

Dear Shahzaib, Ahmed, and Arifa,

Thank you for your interest in our article “*Fenoldopam Use during Cardiopulmonary Bypass and Postoperative Rates of Acute Kidney Injury*.” We appreciate your thoughtful feedback.

In this study, the authors did not stratify the patient population into specific age groups during data extraction or analysis. The term “adults” was used to refer to individuals over the age of 18, with the study population primarily consisting of older adults. Based on the pharmacokinetics and pharmacodynamics of fenoldopam the authors felt there was a low level of importance and low value in age stratification. The two groups were similar in baseline ages.

An example of a prior study completed by Patmcek et al evaluated fenoldopam for the treatment of hypertension referred to their adult population between the ages of 21 and 80 (1). Another study focused on the treatment of hypertension in elderly patients did not note any differences in the pharmacokinetics or pharmacodynamics of fenoldopam in their study population. The dosing range they used included the pre-op dosing strategy that the authors of the current study used as well (2). No differences or dosing recommendations for elderly versus adult population was noted in the package insert either (3).

Your suggestion to categorize age groups more precisely is an excellent one and would certainly enhance the depth of future investigations. We appreciate your insight and will consider this approach in subsequent research studies.

Sincerely,

Brian Oyler, PharmD, Beaufort Memorial Hospital
Nayda Parisio Poldiak, MSc., Ph.D., South Atlantic Division Research Director – HCA Healthcare

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References

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