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Letter to Editor

Comment on "Gout: Evaluation and Management"

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Dear Editor,

In the review titled "Gout: Evaluation and Management" presented by Huzmeli, the topic is summarized in a comprehensive, clear, and fluent manner (1). As highlighted by Huzmeli, among urate-lowering therapy (ULT) agents used in the management of hyperuricemia and gout, allopurinol has long served as the first-line treatment. However, in recent years, strong evidence has demonstrated that febuxostat is more effective, particularly in achieving target serum uric acid levels. Furthermore, the renal elimination of allopurinol poses certain limitations in patients with chronic kidney disease (CKD), while the frequency of adverse effects remains a clinical concern. These factors collectively increase the relevance of febuxostat in patients with CKD.

Randomized controlled trials such as FACT and APEX have shown that febuxostat achieves target serum uric acid levels at a higher rate than allopurinol in patients both with normal renal function and with CKD (2,3). In CKD, the dose of allopurinol needs to be reduced due to its renal excretion. Therefore, the use of effective doses may be limited, which could compromise treatment efficacy. In contrast, febuxostat is primarily metabolized in the liver, allowing its administration at therapeutic doses without the need for dose adjustment in patients with impaired renal function. This characteristic is of particular importance in preventing inflammation, crystal deposition, and renal disease progression associated with uric acid accumulation.

On the other hand, the CARES trial raised concerns about a possible association between febuxostat and cardiovascular mortality (4). The fact that the patients in this trial already had a history of cardiovascular disease may have influenced the results. Indeed, the FAST trial did not confirm these findings and showed that febuxostat did not increase cardiovascular risk (5). Therefore, treatment decisions should be individualized based on cardiovascular risk assessment.

In conclusion, although allopurinol still retains its status as a first-line drug in guidelines, current literature indicates that febuxostat provides more effective serum uric acid control than allopurinol, particularly in patients with CKD. When used in appropriate patients with appropriate cardiovascular monitoring, febuxostat should be considered an important therapeutic option in nephrology practice.

DECLARATIONS

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REFERENCES

1. Huzmeli C. Gout: Evaluation and Management. *J Eur Int Med Prof.* 2025;3(3):129-37. https://doi.org/10.5281/zenodo.16740509.
2. Becker MA, Schumacher HR, Wortmann RL, et al. Febuxostat compared with allopurinol in patients with hyperuricemia and gout. *N Engl J Med.* 2005;353:2450-61. https://doi.org/10.1056/NEJMoa050373.
3. Schumacher HR, Becker MA, Wortmann RL, et al. Effects of febuxostat versus allopurinol and placebo in reducing serum urate in subjects with hyperuricemia and gout: A 28-week, phase III, randomized, double-blind, parallel-group trial. *Arthritis Care & Research*. 2008;59(11):1540-8. https://doi.org/10.1002/art.24209.
4. White WB, Saag KG, Becker MA, et al. Cardiovascular safety of febuxostat or allopurinol in patients with gout. *N Engl J Med.* 2018;378:1200-10. https://doi.org/10.1056/NEJMoa1710895.
5. Mackenzie IS, Ford I, Nuki G, et al. Long-term cardiovascular safety of febuxostat compared with allopurinol in patients with gout (FAST): a multicentre, prospective, randomised, open-label, non-inferiority trial. Lancet. 2020;396(10264):1745-57. https://doi.org/10.1016/S0140-6736(20)32234-0.