

Comparison of ibuprofen and paracetamol combination with ketorolac and paracetamol in patients undergoing gynecologic surgery: A review of pain level, coagulation profile, and interleukin-6 levels

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Background: Postoperative pain management in gynecological surgery remains a significant challenge, with many patients experiencing moderate to severe pain despite standard analgesic interventions. The risk of complications, such as bleeding and prolonged recovery, is heightened by the use of certain analgesics, emphasizing the need for optimal pain management strategies. This study compares the efficacy of two multimodal analgesic regimens-ibuprofen-paracetamol and ketorolac-paracetamol-on pain, coagulation, and interleukin-6 (IL-6) levels.

Methods: A double-blind randomized trial was conducted with 40 patients undergoing gynecological surgery. Group 1 received IV ibuprofen (400 mg) + paracetamol (1000 mg); Group 2 received IV ketorolac (30 mg) + paracetamol (1000 mg). Numeric Rating Scale (NRS), clotting time (CT), bleeding time (BT), and IL-6 were assessed at 6, 24, and 48 hours postoperatively.

Results: Pain scores and CT did not differ significantly between the groups. The ketorolac group showed a significant increase in BT at 24 and 48 hours ($p < 0.05$), while the ibuprofen group had significantly lower IL-6 levels at 24 hours ($p < 0.05$).

Conclusion: Both regimens were equally effective for pain control. However, ketorolac-paracetamol significantly prolonged bleeding time, while ibuprofen-paracetamol was more effective in reducing inflammation by lowering IL-6 levels. These differences should be considered, particularly in patients at risk of bleeding.

Key words: pain management, coagulation profile, interleukin-6, ibuprofen, ketorolac, paracetamol, gynecological surgery.

Srovnání kombinace ibuprofenu a paracetamolu s ketorolakem a paracetamolem u pacientek podstupujících gynekologickou operaci: přehled úrovně bolesti, koagulačního profilu a hladin interleukinu-6

Úvod: Léčba pooperační bolesti u gynekologických výkonů i nadále představuje závažný problém, jelikož mnoho pacientek pociťuje středně silnou až silnou bolest, a to i navzdory standardním analgetickým postupům. Riziko komplikací, jako je krvácení a prodloužená doba rekonvalescence, se zvyšuje při užití některých analgetik, což zdůrazňuje nutnost optimálních strategií pro zvládnutí bolesti. Tato studie srovnává účinnost dvou multimodálních analgetických režimů – ibuprofen-paracetamol a ketorolac-paracetamol – na bolest, koagulaci a hladiny interleukinu-6 (IL-6).

Metody: Byla provedena dvojitě zaslepená studie se 40 pacientkami, které podstoupily gynekologickou operaci. Skupině 1 byl podán intravenózně ibuprofen (400 mg) + paracetamol (1000 mg); skupina 2 obdržela intravenózně ketorolac (30 mg)

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Článek přijat redakcí: 16. 6. 2025; Článek přijat k tisku: 6. 10. 2025

Cit. zkr: Anest intenziv Med. 2025;36(4):247-252