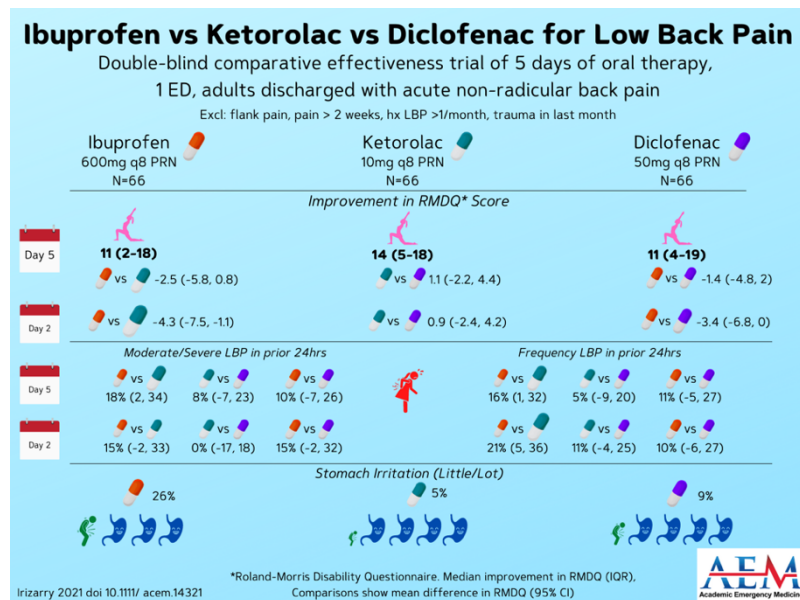


November 2021

A Randomized Controlled Trial of Pain Relievers for Acute Low Back Pain

Des Plaines, IL – There were no important differences between patients given ibuprofen, ketorolac, and diclofenac for the treatment of acute, nonradicular low back pain (LBP) with regard to the primary outcome. That is the conclusion of the study titled [A randomized controlled trial of ibuprofen versus ketorolac versus diclofenac for acute, nonradicular low back pain](#), published in the November issue of Academic Emergency Medicine (AEM), a peer-reviewed journal of the Society for Academic Emergency Medicine (SAEM).



INFOGRAPHIC CREDIT: Ian Ferguson, MD, Washington University

In the three-armed, double-blind, comparative effectiveness study, patients were enrolled at the conclusion of an emergency department (ED) visit for musculoskeletal LBP and determined outcomes by telephone five days later. Patients were randomized to receive a five-day supply of 600 mg of ibuprofen, 10 mg of ketorolac, or 50 mg of diclofenac, each to be used every eight hours as needed. Every participant also received LBP education. The primary outcome was improvement in Roland-Morris Disability Questionnaire (RMDQ), a 24-item instrument on which lower scores indicate better LBP functional outcomes, between ED visit and day five. Secondary outcomes included pain intensity, measured using the descriptors none, mild, moderate, and severe, and the presence of stomach irritation.

The study contributes to the existing literature supporting ketorolac as an appropriate treatment for acute LBP and it does not rule out the possibility that ketorolac results in better pain relief and less stomach irritation than ibuprofen.

The lead author of the study is Eddie Irizarry, MD, a board-certified emergency medicine physician and assistant professor at the department of emergency medicine, Montefiore Medical Center, Albert Einstein College of Medicine, Bronx, New York.

Results of the study were discussed in a recent [AEM podcast](#).

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ABOUT ACADEMIC EMERGENCY MEDICINE

Academic Emergency Medicine, the monthly journal of Society for Academic Emergency Medicine, features the best in peer-reviewed, cutting-edge original research relevant to the practice and investigation of emergency care. The above study is published open access and can be downloaded by following the [DOI link: 10.1111/acem.14321](https://doi.org/10.1111/acem.14321). Journalists wishing to interview the authors may contact Tami Craig at tcraig@saem.org.

ABOUT THE SOCIETY FOR ACADEMIC EMERGENCY MEDICINE

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