Letters to the Editor

Should Muscle Relaxants Be Used as Adjuvants in Patients With Acute Low Back Pain?

Original Articles: Top 20 Research Studies of 2020 for Primary Care Physicians; Pharmacologic Therapy for Acute Pain

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See additional reader comments at: https://www.aafp.org/afp/2021/0700/p41.html and https://www.aafp.org/afp/2021/0700/p63.html

To the Editor: Thank you for addressing the important topic of acute pain treatment, which we encounter every day in clinical practice. We were confused by conflicting information about the use of muscle relaxants as adjunctive therapies for acute back pain.

In "Top 20 Research Studies of 2020 for Primary Care Physicians," one of the studies is a rigorously designed and implemented randomized controlled trial evaluating the effectiveness of ibuprofen plus muscle relaxants compared with ibuprofen plus placebo for moderate to severe low back pain. The investigators found no difference in short-term pain outcomes between the two groups, leading them to conclude that muscle relaxants do not improve pain or function when added to ibuprofen to treat acute back pain.

In "Pharmacologic Therapy for Acute Pain," the authors reference practice guidelines and two systematic reviews that support the use of muscle relaxants as adjuvants to analgesics for back pain.^{2,3} However, these reviews provide little evidence for the adjunctive treatment of low back pain with muscle relaxants. Instead, the included studies found that muscle relaxants were effective compared with placebo.

Based on the available data, we suggest that the recommendation to prescribe muscle relaxants as adjunctive therapy for acute low back pain is based on expert opinion (SORT C), not SORT A evidence as originally reported in "Pharmacologic Therapy for Acute Pain."

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This series is coordinated by Kenny Lin, MD, MPH, deputy editor.

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In Reply: We appreciate Drs. Schoonover and Rubin's comments and agree that the treatment of acute pain requires an evidence-based approach. Our article commented on an older systematic review and a review of a small number of studies, 1,2 whereas Drs. Grad and Ebell highlighted one recent good-quality randomized controlled trial that encourages us to question the existing literature. A more recent systematic review and meta-analysis concluded that although muscle relaxants may be effective, the risks may outweigh the small benefits. The trial highlighted by Drs. Grad and Ebell may also suggest the superiority of nonsteroidal anti-inflammatory drugs for acute pain as much as it highlights the mixed data on muscle relaxants.

We agree that the SORT level should be changed but suggest that level B is more appropriate because of inconsistent evidence. Several good-quality studies suggest that muscle relaxants are effective in relieving acute low back pain; therefore, they should be used selectively after consideration of risks and benefits.

Further trials will help determine whether muscle relaxants should be avoided and clarify the use of muscle relaxants as adjuvants to topical analgesics in the management of acute pain syndromes.

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