

# POEMs

## Nonopioids Equivalent to Opioids for Severe Chronic Back, Hip, or Knee Pain with Fewer Adverse Outcomes

### Clinical Question

Are opioid medications preferable for improving pain-related function in adults with severe chronic back, hip, or knee pain?

### Bottom Line

Nonopioid medications were at least as effective as opioid medications for improving pain-related function over 12 months in adults with severe chronic back pain or knee or hip osteoarthritis pain. The evidence that opioids are not superior to nonopioid medications for chronic and acute pain continues to mount. The tough job will be getting patients and their clinicians to believe the evidence. (Level of Evidence = 1b)

### Synopsis

For decades, patients and clinicians have believed that opioids are superior for reducing pain and improving function in patients with severe chronic pain. Investigators identified adults with chronic back pain or hip or knee osteoarthritis pain that rated at least moderately severe on a standard pain rating scale and persisted every day for at least six months. Patients with severe depression or posttraumatic stress disorder symptoms were not excluded. Study participants (N = 240) randomly received assignment (concealed allocation) to an opioid or nonopioid pain management group. Patients in the opioid group started taking immediate-release oral opioids with escalation to sustained-released oral opioids and finally to transdermal fentanyl, if needed. Titration continued to a maximum daily dosage of 100 morphine-equivalent milligrams. Patients in the nonopioid medication group started with acetaminophen

and nonsteroidal anti-inflammatory drugs, with step-up as needed to adjuvant oral medications (e.g., amitriptyline, gabapentin [Neurontin]) and topical analgesics (e.g., capsaicin, lidocaine), and finally to pregabalin (Lyrica), duloxetine (Cymbalta), and/or tramadol, if needed. Medication adherence was monitored by urine drug testing and with regular checking of a state prescription monitoring program. Individuals who assessed outcomes remained masked to treatment group assignment. Follow-up rates ranged from 90% to 98% of patients at 12 months. The mean age was 58.3 years (range = 21 to 80 years), and 13% were women.

Using intention-to-treat analyses, there was no significant group difference in pain-related function over 12 months based on standard rating scales. Overall, pain intensity was significantly better in the nonopioid group over 12 months. Dropouts because of adverse medication-related symptoms were significantly higher in the opioid group than in the nonopioid group (19% vs. 8%, respectively). No deaths or diversions were detected in either group. Tramadol was dispensed to 11% of patients in the nonopioid group over the 12 months of follow-up.

**Study design:** Randomized controlled trial (nonblinded)

**Funding source:** Government

**Allocation:** Concealed

**Setting:** Outpatient (primary care)

**Reference:** Krebs EE, Gravelly A, Nugent S, et al. Effect of opioid vs nonopioid medications on pain-related function in patients with chronic back pain or hip or knee osteoarthritis pain: the SPACE randomized clinical trial. *JAMA*. 2018;319(9):872-882.

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