

## Nonopioid Treatments for Chronic Pain

### Principles of Chronic Pain Treatment

Patients with pain should receive treatment that provides the greatest benefit. Opioids are not the first-line therapy for chronic pain outside of active cancer treatment, palliative care and end-of-life care. Evidence suggests that nonopioid treatments, including nonopioid medications and nonpharmacological therapies can provide relief to those suffering from chronic pain, and are safer. Effective approaches to chronic pain should:

- Use nonopioid therapies to the extent possible
- Identify and address co-existing mental health conditions (e.g., depression, anxiety, PTSD)
- Focus on functional goals and improvement, engaging patients actively in their pain management
- Use disease-specific treatments when available (e.g., triptans for migraines, gabapentin/pregabalin/duloxetine for neuropathic pain)
- Use first-line medication options preferentially
- Consider interventional therapies (e.g., corticosteroid injections) for patients who fail standard non-invasive therapies
- Use multimodal approaches, including interdisciplinary rehabilitation for patients who have failed standard treatments, have severe functional deficits, or psychosocial risk factors

Nonopioid Medications			
Medication	Magnitude of Benefits	Harms	Comments
Acetaminophen First-line analgesic, probably less effective than NSAIDs	Small	Hepatotoxic, particularly at higher doses	First-line analgesic, probably less effective than NSAIDs
NSAIDs	Small-moderate	Cardiac, GI, renal	First-line analgesic, COX-2 selective NSAIDs less GI toxicity
Gabapentin/pregabalin	Small-moderate	Sedation, dizziness, ataxia	First-line agent for neuropathic pain; pregabalin approved for fibromyalgia
Tricyclic antidepressants and serotonin/norepinephrine reuptake inhibitors	Small-moderate	TCAs have anticholinergic and cardiac toxicities; SNRIs safer and better tolerated	First-line for neuropathic pain; TCAs and SNRIs for fibromyalgia, TCAs for headaches
Topical agents (lidocaine, capsaicin, NSAIDs)	Small-moderate	Capsaicin initial flare/burning, irritation of mucus membranes	Consider as alternative first-line, thought to be safer than systemic medications. Lidocaine for neuropathic pain, topical NSAIDs for localized osteoarthritis, topical capsaicin for musculoskeletal and neuropathic pain

# STOP THE OPIDEMIC

## Recommended treatments for common chronic pain conditions

### Low Back Pain

- **Self-care and education for all patients:** advise patients to remain active and limit bedrest
- **Nonpharmacological treatments:** Exercise, cognitive behavioral therapy, interdisciplinary rehabilitation
- **Medications**
  - First-line: acetaminophen, non-steroidal anti-inflammatory drugs (NSAIDs)
  - Second-line: Serotonin and norepinephrine reuptake inhibitors (SNRIs)/tricyclic antidepressants (TCAs)

### Migraine

- **Preventive treatments**
  - Beta-blockers
  - TCAs
  - Antiseizure medications
  - Calcium channel blockers
  - Non-pharmacological treatments (Cognitive behavioral therapy, relaxation, biofeedback, exercise therapy)
  - Avoid migraine triggers
- **Acute treatments**
  - Aspirin, acetaminophen, NSAIDs (may be combined with caffeine)
  - Antinausea medication
  - Triptans-migraine-specific

### Neuropathic Pain

- **Medications:** TCAs, SNRIs, gabapentin/pregabalin, topical lidocaine

### Osteoarthritis

- **Nonpharmacological treatments:** Exercise, weight loss, patient education
- **Medications**
  - First-line: Acetaminophen, oral NSAIDs, topical NSAIDs
  - Second-line: Intra-articular hyaluronic acid, capsaicin (limited number of intra-articular glucocorticoid injections if acetaminophen and NSAIDs insufficient)

### Fibromyalgia

- **Patient education:** Address diagnosis, treatment, and the patient's role in treatment
- **Nonpharmacological treatments:** Low-impact aerobic exercise (e.g., brisk walking, swimming, water aerobics or bicycling), cognitive behavioral therapy, biofeedback, interdisciplinary rehabilitation
- **Medications**
  - FDA-approved: Pregabalin, duloxetine, milnacipran
  - Other options: TCAs, gabapentin