

## Journal Watch

Pharmacologic management of neuropathic pain: Evidence-based recommendations  
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### Abstract:

Patients with neuropathic pain (NP) are challenging to manage and evidence-based clinical recommendations for pharmacologic management are needed. Systematic literature reviews, randomized clinical trials, and existing guidelines were evaluated at a consensus meeting. Medications were considered for recommendation if their efficacy was supported by at least one methodologically-sound, randomized clinical trial (RCT) demonstrating superiority to placebo or a relevant comparison treatment.

Recommendations were based on the amount and consistency of evidence, degree of efficacy, safety, and clinical experience of the authors. Available RCTs typically evaluated chronic NP of moderate to severe intensity. Recommended first-line treatments include certain antidepressants (i.e., tricyclic antidepressants and dual reuptake inhibitors of both serotonin and norepinephrine), calcium channel  $\alpha_2\text{-}\delta$  ligands (i.e., gabapentin and pregabalin), and topical lidocaine. Opioid analgesics and tramadol are recommended as generally second-line treatments that can be considered for first-line use in select clinical circumstances. Other medications that would generally be used as third-line treatments but that could also be used as second-line treatments in some circumstances include certain antiepileptic and antidepressant medications, mexiletine, *N*-methyl-d-aspartate receptor antagonists, and topical capsaicin.

Medication selection should be individualized, considering side effects, potential beneficial or deleterious effects on comorbidities, and whether prompt onset of pain relief is necessary. To date, no medications have demonstrated efficacy in lumbosacral radiculopathy, which is probably the most common type of NP. Long-term studies, head-to-head comparisons between medications, studies involving combinations of medications, and RCTs examining treatment of central NP are lacking and should be a priority for future research.

### Comments:

**Strengths/uniqueness:** This paper provides a useful synopsis of current evidence on pharmacological agents for treatment of neuropathic pain. It takes into consideration not only efficacy and side effects, but also convenience and cost. The tables summarize the information in a helpful manner.

**Weaknesses:** The recommendations are based on expert consensus, and therefore may reflect the biases of the authors.

Relevance to Palliative Care: Neuropathic pain is a frequent and challenging problem in advanced cancer patients. Most studies of analgesic agents for this condition have been conducted in populations without cancer, and therefore it is unclear to what extent the results can be extrapolated to cancer patients. It is important to note that opioids are still considered as first-line agents for treatment of neuropathic pain in cancer patients. SSNRI's may play an increasing role, as they have fewer side effects than TCAs. Pregabalin may also present potential advantages compared to gabapentin, in terms of greater ease of dosing and titration, with similar efficacy; however, it is more costly.