

# Current considerations for the treatment of severe chronic pain: the potential for tapentadol

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## Erratum in

- Pain Pract. 2013 Sep;13(7):597. Álvaro, Ángel Oteo [corrected to Oteo-Álvaro, Ángel]

## Abstract

Studies suggest that around 20% of adults in Europe experience chronic pain, which not only has a considerable impact on their quality of life but also imposes a substantial economic burden on society. More than one-third of these people feel that their pain is inadequately managed. A range of analgesic drugs is currently available, but recent guidelines recommend that NSAIDs and COX-2 inhibitors should be prescribed cautiously. Although the short-term efficacy of opioids is good, adverse events are common and doses are frequently limited by tolerability problems. There is a perceived need for improved pharmacological treatment options. Currently, many treatment decisions are based solely on pain intensity. However, chronic pain is multifactorial and this approach ignores the fact that different causative mechanisms may be involved. The presence of more than one causative mechanism means that chronic pain can seldom be controlled by a single agent. Therefore, combining drugs with different analgesic actions increases the probability of interrupting the pain signal, but is often associated with an increased risk of drug/drug interactions, low compliance and increased side effects. Tapentadol combines  $\mu$ -opioid receptor agonism and noradrenaline reuptake inhibition in a single molecule, with both mechanisms contributing to its analgesic effects. Preclinical testing has shown that  $\mu$ -opioid agonism is primarily responsible for analgesia in acute pain, whereas noradrenaline reuptake inhibition is more important in chronic pain. In clinical trials in patients with chronic pain, the efficacy of tapentadol was similar to that of oxycodone, but it produced significantly fewer gastrointestinal side-effects and treatment discontinuations. Pain relief remained stable throughout a 1-year safety study. Thus, tapentadol could possibly overcome some of the limitations of currently available analgesics for the treatment of chronic pain.

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