

Do antidepressants help to treat hip and knee osteoarthritis?

Clinical Question	Are antidepressants effective and safe for the treatment of symptomatic knee and hip osteoarthritis in adults?
Bottom Line	<p>Based on moderate- and high-certainty evidence, although antidepressant use in lower limb osteoarthritis improves pain, function and quality of life, the degree of improvement is small and not clinically important across the whole population. However, also based on high-certainty evidence, the proportion of people achieving a clinically meaningful improvement in pain is higher in people taking antidepressants. This suggests the possibility that there may be a subpopulation that is more likely to respond to this therapy.</p> <p>Antidepressant use is associated with an increased number of adverse events compared with placebo and consequentially had reduced tolerability. Serious adverse events were present in all trials, but with no preponderance towards either the antidepressants or placebo. The adverse events may limit the use of antidepressants in the community and the patients' comorbidities need to be considered.</p>
Caveat	There was extensive exclusion criteria with regard to comorbid illnesses in the included studies therefore, participants in the study populations may be overall healthier than those seen in standard clinical practice. This is especially relevant when considering psychiatric conditions. Pain and depression are linked, with 29% to 86% of people experiencing chronic pain having concomitant depression, perhaps through interactions of fatigue, disability and emotional stress. Consequently, the exclusion of people with depression or major psychiatric problems further limits the applicability of the results to this subset of patients.
Context	Although pain is common in osteoarthritis, most people fail to achieve adequate analgesia. Increasing acknowledgement of the contribution of pain sensitisation has resulted in the investigation of medications affecting pain processing with central effects. Antidepressants contribute to pain management in other conditions where pain sensitisation is present.
Cochrane Systematic Review	Leaney AA, Lyttle JR, Segan J, Urquhart DM, Cicuttini FM, Chou L, Wluka AE. Antidepressants for hip and knee osteoarthritis. Cochrane Database of Systematic Reviews 2022, Issue 10. Art. No.: CD012157. DOI: 10.1002/14651858.CD012157.pub2. This review contains 9 trials with a total of 2122 participants.

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Systematic review link:

<https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD012157.pub2/full>