



Risks of oral or transdermal opioids outweigh benefits for osteoarthritis of the knee or hip

Clinical question

How effective are oral or transdermal opioids in patients with osteoarthritis (OA) of the knee or hip?

Bottom line

Compared to placebo or no intervention, the small to moderate beneficial effects in terms of pain relief (NNT* 8) and improvement in function (NNT 10) of opioids were outweighed by large increases in the risk of adverse events (NNH** 12 for any adverse events and NNH 19 for withdrawal because of adverse events). There were no substantial differences in effects according to type of opioid, analgesic potency (strong or weak), daily dose, duration of treatment or follow-up, methodological quality of trials, and type of funding. Withdrawal symptoms were more severe after fentanyl treatment compared to placebo. Preparations studied included oral codeine, morphine, oxycodone, oxycodone and transdermal fentanyl. Tramadol was excluded. A 2009 Cochrane Review¹ found the benefits of tramadol were comparable with those obtained with paracetamol and these benefits were coupled with a less favourable safety profile.

*NNT = number needed to treat to benefit 1 individual

**NNH = number needed to treat to cause harm in 1 individual

Caveat

The treatment durations were relatively short (3 days to 3 months; median 4 weeks). The reporting of safety outcomes was incomplete, with adverse events reported in 4 trials, and serious adverse events in 3 trials only. Most of the trials were funded by the pharmaceutical industry. While no evidence of long term effects is available from randomised trials, observational studies indicate long term treatment (>6 months) with opioids for chronic conditions, such as OA, may have deleterious effects, including poorer quality of life and reduced functional capacity, and does not seem to improve pain relief.²

Context

OA is the most common form of joint disease and the leading cause of pain and physical disability in the elderly. Opioids may be a viable treatment option if patients suffer from severe pain, or if other analgesics are contraindicated. However, the evidence on their effectiveness and safety is contradictory.

Cochrane Systematic Review

Nuesch E et al. Oral or transdermal opioids for osteoarthritis of the knee or hip. Cochrane Reviews 2009, Issue 4. Article No. CD003115. DOI:10.1002/14651858.CD003115.pub3.

This review contains 10 studies involving 2268 participants.

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Further references

1. Cepada MS et al. Cochrane Reviews 2009, Issue 3. Article No. CD005522. DOI: 10.1002/14651858.CD005522.pub2.

2. Eriksen J et al. *Pain* 2006;125:172–79.

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