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[Intervention Review]

Interventions for the reduction of prescribed opioid use in chronic non-cancer pain

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ABSTRACT

Background

This is the first update of the original Cochrane Review published in 2013. The conclusions of this review have not changed from the 2013 publication. People with chronic non-cancer pain who are prescribed and are taking opioids can have a history of long-term, high-dose opioid use without effective pain relief. In those without good pain relief, reduction of prescribed opioid dose may be the desired and shared goal of both patient and clinician. Simple, unsupervised reduction of opioid use is clinically challenging, and very difficult to achieve and maintain.

Objectives

To investigate the effectiveness of different methods designed to achieve reduction or cessation of prescribed opioid use for the management of chronic non-cancer pain in adults compared to controls.

Search methods

For this update we searched CENTRAL, MEDLINE, and Embase in January 2017, as well as bibliographies and citation searches of included studies. We also searched one trial registry for ongoing trials.

Selection criteria

Included studies had to be randomised controlled trials comparing opioid users receiving an intervention with a control group receiving treatment as usual, active control, or placebo. The aim of the study had to include a treatment goal of dose reduction or cessation of opioid medication.

Data collection and analysis

Two review authors independently extracted data and assessed risk of bias. We sought data relating to prescribed opioid use, adverse events of opioid reduction, pain, and psychological and physical function. We planned to assess the certainty of the evidence using the GRADE approach, however, due to the heterogeneity of studies, we were unable to combine outcomes in a meta-analysis and therefore we did not assess the evidence with GRADE.

Main results

Three studies are new to this update, resulting in five included studies in total (278 participants). Participants were primarily women (mean age 49.63 years, SD = 11.74) with different chronic pain conditions. We judged the studies too heterogeneous to pool data in a meta-analysis, so we have summarised the results from each study qualitatively. The studies included acupuncture, mindfulness, and cognitive behavioral therapy interventions aimed at reducing opioid consumption, misuse of opioids, or maintenance of chronic pain management treatments. We found mixed results from the studies. Three of the five studies reported opioid consumption at post-treatment and follow-up. Two studies that delivered 'Mindfulness-Oriented Recovery Enhancement' or 'Therapeutic Interactive Voice Response' found a significant difference between groups at post-treatment and follow-up in opioid consumption. The remaining study found reduction in opioid consumption in both treatment and control groups, and between-group differences were not significant. Three studies reported adverse events related to the study and two studies did not have study-related adverse events. We also found mixed findings for pain intensity and physical functioning. The interventions did not show between-group differences for psychological functioning across all studies. Overall, the risk of bias was mixed across studies. All studies included sample sizes of fewer than 100 and so we judged all studies as high risk of bias for that category.

Authors' conclusions

There is no evidence for the efficacy or safety of methods for reducing prescribed opioid use in chronic pain. There is a small number of randomised controlled trials investigating opioid reduction, which means our conclusions are limited regarding the benefit of psychological, pharmacological, or other types of interventions for people with chronic pain trying to reduce their opioid consumption. The findings to date are mixed: there were reductions in opioid consumption after intervention, and often in control groups too.

PLAIN LANGUAGE SUMMARY

Reducing prescribed opioid use in adults with chronic non-cancer pain

Bottom line

Based on the available evidence, we do not know the best method of reducing opioids in adults with chronic pain conditions. We found mixed results from a small number of studies included in this review.

Background

This is an updated review. The first review was published in 2013. About one in five adults suffer from moderate or severe chronic pain that is not caused by cancer. Some people with this type of pain are treated with opioids (typically with drugs such as morphine, codeine, oxycodone, fentanyl, or buprenorphine, either as tablets or as patches placed on the skin). It is not unusual for this medication to be ineffective or to stop working over time, and, sometimes, effective pain relief is not achieved despite doses being increased. Stopping using opioid drugs is not easy, especially when they have been used for some time, because stopping abruptly can cause unpleasant side effects.This review looked for high-quality studies (randomised controlled trials) of treatments to help adults safely stop taking opioids prescribed for their pain.

Study characteristics

We searched for studies up to January 2017. We found five studies, and they investigated 278 people. Most people included in the studies were women, who were around 50 years of age, and reported a mixture of chronic pain conditions (e.g. headache, back pain, muscle pain). The studies included acupuncture, mindfulness, and cognitive behavioral therapy as strategies to decrease the amount of opioids taken by adults with chronic pain.

Key results

No conclusions can be drawn from this small amount of information. Therefore, it is not clear whether these treatments decrease the amount of opioids in adults with chronic pain (primary outcome) or reduce pain intensity, physical ability or mood (secondary outcomes). Three studies did include negative effects of their treatment, and two reported that the participants did not have anything negative happen to them because of the trial they were in. Non-randomised studies, not included in this review, do indicate that for many people intensive rehabilitation packages may bring about major reduction in opioid use. Reducing prescribed opioid use in chronic non-cancer pain is an important topic in need of more systematic research.

Quality of the evidence

We were not able to judge the quality of evidence included in this review because the studies were so different and could not be combined.