Use of oral oxymorphone in the elderly

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CRD summary
The review assessed the safety and efficacy of oral oxymorphone in pain management. The author concluded that oxymorphone did not have any unique assets or liabilities compared with other opioids. Since insufficient details of the included studies of review methodology were described, it was not possible to assess the reliability of these results.

Authors' objectives
To review the efficacy and safety of immediate-release and extended-release oral oxymorphone in the elderly.

Searching
MEDLINE via PubMed (1970 to September 2006) was searched for English-language studies. The search terms used were not listed in the review. Bibliographies of the identified papers were scanned for additional papers. No mention was made of how the author searched for unpublished data, but it appeared that the manufacturer was contacted for further data, as these were included in the review.

Study selection
Human studies of any design of patients who took oxymorphone were eligible for inclusion. No further participant or outcome criteria were stated.

The mean age of patients, where reported, ranged from 45 to 67 years. The indications for treatment were the relief of acute and chronic pain, specifically: post-operative pain relief, osteoarthritis, lower back pain and cancer. Doses of oxymorphone ranged from 10mg to 110mg/day for the extended-release formulation and lasted from one day to one year. For the immediate-release oxymorphone, dose ranged from 5mg hourly to a single 10mg dose. The study designs of the included studies was unclear, although randomised controlled trials and cross-over studies were included.

The author stated neither how the papers were selected for the review nor how many reviewers performed the selection.

Assessment of study quality
The author did not state that he assessed validity.

Data extraction
The author stated neither how the data were extracted for the review nor how many reviewers performed the data extraction.

Methods of synthesis
The results of the studies were synthesised narratively and grouped according to indication.

Results of the review
Eight studies (approximately 1,861 participants) were included in the review; one study was a follow-on trial and included some of the same patients as an earlier included study.

In the two studies of post-operative pain relief, oxymorphone immediate release was significantly more effective than placebo or oxycodone immediate release, but the doses of oxymorphone and oxycodone given were not equivalent.

In one study of post-operative pain relief and five of chronic pain, oxymorphone extended release was significantly more effective than placebo and was equivalent to controlled-release oxycodone or morphine.

The adverse event profile of oxymorphone was comparable with those of oxycodone or morphine.

Unpublished data from the manufacturer found no difference in efficacy according to age, but the side effects of
dizziness, somnolence, nausea and confusion were more common in older (≥65 years) patients than in younger patients.

**Authors' conclusions**
Oral oxymorphone did not have any unique assets or liabilities and should be considered as one of the many opioids available for the treatment of acute and persistent moderate to severe pain.

**CRD commentary**
The participant and outcome inclusion criteria were not stated, and all study designs were eligible for inclusion. The limited information provided on the search strategy made it impossible to assess how complete it was. Since only English-language papers were eligible for inclusion, it was likely that the results may be affected by language bias. As validity did not appear to be assessed, the reliability of the results was unclear. Insufficient details were provided on the designs of the studies, which again precluded assessment of the reliability of the review's results.

The author's conclusions were based on the presented data. Since insufficient details of the included studies of review methodology were described, it was impossible to assess the reliability of the results.

**Implications of the review for practice and research**
The author did not state any implications for practice or further research.

**Funding**
Not stated.

**Bibliographic details**

**PubMedID**
17658959

**Indexing Status**
Subject indexing assigned by NLM

**MeSH**
Administration, Oral; Aged; Analgesics, Opioid /administration & dosage /adverse effects /chemistry /pharmacokinetics; Delayed-Action Preparations; Drug Interactions; Humans; Oxymorphone /administration & dosage /adverse effects /chemistry /pharmacokinetics; Pain /drug therapy; Pain Measurement; Randomized Controlled Trials as Topic

**AccessionNumber**
12008107240

**Date bibliographic record published**
02/03/2009

**Date abstract record published**
16/09/2009

**Record Status**
This is a critical abstract of a systematic review that meets the criteria for inclusion on DARE. Each critical abstract contains a brief summary of the review methods, results and conclusions followed by a detailed critical assessment on the reliability of the review and the conclusions drawn.