Harms and Benefits of Opioids for Management of Non-Surgical Chronic Low-Back Pain: A Systematic Review

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**Background**
- Although commonly prescribed, no major multidisciplinary low back pain guidelines recommend opioids as an initial intervention for chronic, non-cancer pain
- 75% of people addicted to heroin were originally prescribed an opioid
- Opioids have many undesirable side effects
- Tolerance due to prolonged use can create a cycle in which patients require higher and higher doses
- Despite these facts, and a growing epidemic, opioids are commonly prescribed for low back pain without considering a more conservative approach first

**Methods**
- A systematic review was performed using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guideline and was conducted in MEDLINE, Embase, and Web of Science.
  - Randomized Control Trial
  - English Language
  - Published after 2000
  - Low Back Pain
  - Opioid-Naïve or Previous Opioid Use

**Inclusion Criteria**
- Radicular Pain
- Prior Surgical Intervention
- Cancer
- Deformity
- Infection

**Exclusion Criteria**
- Description and Severity of Reported Harms
- Pain Relief Outcomes
- Study Quality and Conflict of Interest

**Data Extraction**
- Adverse Event
- Serious
- Withdrawal From Study

**Results**
- 12 RCTs met criteria and were included in our review
- Opioids produced greater pain relief than placebo, but were **NOT superior to non-steroidal anti-inflammator**es
- High rates of **adverse events** and **patient withdrawal** were associated with oral opioid intervention
- The higher the dose of opioids, the higher the rate of harms
- All trials were **short-term**
- **Significant conflict of interest** was found in most studies

**Percentage of Patients Experiencing Adverse Event**
- Most Common Short-Term* Adverse Events reported: headache, vomiting, diarrhea, somnolence, constipation, and nausea.

*Study length ranged from 4 weeks to 1 year. Documented harms of long-term opioid therapy include addiction, overdose, and death.

**Clinical Relevance**
- Opioid use leads to high incidences of harms and should not be prescribed for the treatment of low back pain.

**Acknowledgements / References**
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