

Background

Chronic pain is one of the most common reasons adults seek healthcare in the United States.¹ Appropriately treating chronic pain is crucial to enhance quality of life, maintain physical and mental health, and avoiding medication misuse.

Purpose

The purpose of this report is to assess the efficacy of nonopioids compared to opioids in managing chronic noncancer pain to optimize effectiveness and safety.

PICOT

In patients with chronic noncancer pain, do nonopioids compared to opioids result in improved pain control and intensity, physical functioning, and adverse effects?

Design & Methods

Keywords:

chronic pain, opioids, nonopioids, analgesics, noncancer

Inclusion:

Peer-reviewed studies published in English that followed patients 18 years or older with chronic noncancer pain lasting longer than 3 months using the following outcome measures: pain relief and intensity, physical functioning, and adverse effects.

Exclusion:

Studies that were not peer-reviewed, published in English, included adolescents, acute pain, post-operative pain, cancer pain

Summary of Evidence Search

Database	Yielded	Reviewed	Included in Analysis
MEDLINE	15,063	18	2
JAMA	1,263	33	1
PubMed	6,292	12	2
Google Scholar	14,300	16	1
Total:	36,918	79	6

Synthesis of Evidence

The databases above were searched according to the inclusion criteria. This research represents six studies, which include 1 RCT, 2 meta-analysis, and 2 systematic reviews.

Results

- There was no significant difference in pain-related function between the opioid group and nonopioid group ($p=0.58$).²
- Pain intensity was significantly better among groups that received nonopioids ($p=0.03$).²
- Opioid groups experienced significantly more medication related symptoms compared to nonopioid groups ($p=0.03$).²
- Nonopioid analgesics, including NSAIDs and TCAs, were more effective at increasing functional outcomes.³
- Patients receiving opioids had significantly higher rates of three side effects including nausea (14% higher risk), constipation (9% higher risk), and somnolence (6% higher risk).³
- There was no difference in pain intensity for patients who received NSAIDs vs opioids.⁴
- There was no difference in improvement of function between opioids and nonopioids.⁵

Discussion

The results of these six selected studies emphasize the similarity in efficacy of nonopioids compared to opioids. There was no statistically significant difference in pain related function or pain intensity when analyzing patients who received opioids compared to nonopioids. Specifically, treating patients with CNCP with opioids as compared to NSAIDs and TCAs did not result in better results for pain relief, pain intensity, or physical functioning. Groups who received opioids experienced significantly more adverse effects including nausea, constipation, and somnolence.

Limitations and Further Studies

Pain relief, pain intensity, and pain related function were patient reported in the six selected studies. These outcome measurements are open to subjectivity, which has the potential to skew results. Additionally, the studies lack long-term follow up. The longest reported follow up was one year. In order to assess efficacy in treating chronic pain, tolerance is a large factor to consider, which may or may not be present with such short follow ups.

Conclusion:

Although opioids are still one of the most commonly prescribed pharmacologic treatments for chronic pain, studies show that opioids do not provide superior pain relief, intensity, or function and are associated with several more adverse effects.

References:

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