CADTH RAPID RESPONSE REPORT: SUMMARY OF ABSTRACTS

Low-Dose Naltrexone for Chronic Non-Cancer Pain: Clinical Effectiveness
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About CADTH: CADTH is an independent, not-for-profit organization responsible for providing Canada’s health care decision-makers with objective evidence to help make informed decisions about the optimal use of drugs, medical devices, diagnostics, and procedures in our health care system.

Funding: CADTH receives funding from Canada’s federal, provincial, and territorial governments, with the exception of Quebec.
Research Question

What is the clinical effectiveness of low-dose naltrexone for the treatment of adults with chronic non-cancer pain?

Key Findings

One randomized controlled trial and one non-randomized study were identified regarding low-dose naltrexone for chronic, non-cancer pain.

Methods

A limited literature search was conducted on key resources including PubMed, The Cochrane Library, University of York Centre for Reviews and Dissemination (CRD) databases, Canadian and major international health technology agencies, as well as a focused Internet search. No filters were applied to limit the retrieval by study type. Where possible, retrieval was limited to the human population. The search was also limited to English language documents published between January 1, 2007 and May 29, 2017. Internet links were provided, where available.

Selection Criteria

One reviewer screened citations and selected studies based on the inclusion criteria presented in Table 1.

Table 1: Selection Criteria

<table>
<thead>
<tr>
<th>Population</th>
<th>Adult patients experiencing chronic non-cancer pain (e.g., but not limited to, inflammation, fibromyalgia, Crohn’s disease, multiple sclerosis, complex regional pain syndrome, etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intervention Comparator</td>
<td>Low-dose naltrexone</td>
</tr>
<tr>
<td>Comparator</td>
<td>Standard treatment (e.g., but not limited to, oral and topical NSAIDs, analgesics, anti-depressants, anti-convulsants, opioids, etc.)</td>
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<tr>
<td>Placebo</td>
<td></td>
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<tr>
<td>Outcomes</td>
<td>Clinical effectiveness (e.g., reduction in pain, improved functioning, improved quality of life, etc.)</td>
</tr>
<tr>
<td>Study Designs</td>
<td>Health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, non-randomized studies</td>
</tr>
</tbody>
</table>
Results

Rapid Response reports are organized so that the higher quality evidence is presented first. Therefore, health technology assessment reports, systematic reviews, and meta-analyses are presented first. These are followed by randomized controlled trials and non-randomized studies.

One randomized controlled trial and one non-randomized study were identified regarding low-dose naltrexone for chronic, non-cancer pain. No health technology assessments or systematic reviews were identified.

Additional references of potential interest are provided in the appendix.

Overall Summary of Findings

One randomized controlled trial (RCT)¹ and one non-randomized study² were identified regarding low-dose naltrexone for chronic, non-cancer pain. Both studies examined pain associated with fibromyalgia. The authors of the identified RCT¹ determined that there was a significant reduction in baseline pain in women receiving low-dose naltrexone when compared to placebo. The treatment also appeared to have benefits for the patients with regards to improved mood and satisfaction with life.¹ The authors of the identified blinded non-randomized study² concluded that low-dose naltrexone reduced fibromyalgia symptoms in their cohort of women, with additional improvement in mechanical and heat pain thresholds.

References Summarized

Health Technology Assessments
No literature identified.

Systematic Reviews and Meta-analyses
No literature identified.

Randomized Controlled Trials

Non-Randomized Studies
Appendix — Further Information

Review Articles

Case Studies

Additional References