Timing of Fentanyl Patch Re-Application: Clinical Effectiveness and Guidelines
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Acknowledgments:

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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.
Research Questions

1. What is the clinical evidence regarding the re-application of a new fentanyl patch within 48 hours of a previous application?

2. What are the evidence-based guidelines regarding the re-application of fentanyl patches?

Key Findings

One non-randomized study was identified regarding the re-application of a new fentanyl patch within 48 hours of a previous application.

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 performed on May 18, 2018.

Selection Criteria

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

Table 1: Selection Criteria

<table>
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<th>Population</th>
<th>Patients (any age)</th>
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| Intervention | Q1. Application of the fentanyl patch every 72 hours  
Q2. Re-application of fentanyl patches |
| Comparator | Q1. Re-application of a new fentanyl patch in less than 48 hours  
Q2. No comparator |
| Outcomes | Q1: Clinical effectiveness, safety  
Q2: Guidelines (timing of the patch re-application) |
| Study Designs | Health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, non-randomized studies, evidence-based guidelines |
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, non-randomized studies, and evidence-based guidelines.

One non-randomized study was identified regarding the re-application of a new fentanyl patch within 48 hours of a previous application. No relevant health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, or evidence-based guidelines were identified.

Additional references of potential interest are provided in the appendix.

Overall Summary of Findings

One non-randomized study was identified that examined the reasons for the replacement of fentanyl patches earlier than the recommended 72 hours when used for patients with cancer. The majority (61.6%) of patches were changed after the full 72 hours. Some patch replacement occurred after 48 hours. The authors determined that there was no pharmacological reason for the early replacement of the patches and that poor skin adhesion and breakthrough pain were the main drivers for early replacement.

References Summarized

Health Technology Assessments
No literature identified.

Systematic Reviews and Meta-analyses
No literature identified.

Randomized Controlled Trials
No literature identified.

Non-Randomized Studies


Guidelines and Recommendations
No literature identified.
Appendix — Further Information

Previous CADTH Reports


Non-Randomized Studies – Alternative Dosing Strategy


Additional References
