TITLE: Phenol Matricectomy for Onychocryptosis: Clinical Effectiveness and Guidelines

DATE: 01 September 2016

RESEARCH QUESTIONS

1. What is the comparative clinical effectiveness of liquid phenol matricectomy versus alternative chemical, laser, or surgical treatments for patients with onychocryptosis?

2. What is the clinical evidence regarding the safety of liquid phenol matricectomy for the treatment of onychocryptosis?

3. What are the evidence-based guidelines regarding the appropriate procedure for the treatment of onychocryptosis?

4. What are the evidence-based guidelines regarding the use of phenol for the treatment of onychocryptosis?

KEY FINDINGS

One systematic review, six randomized controlled trials, and five comparative, non-randomized studies were identified regarding the comparative clinical effectiveness of phenol matricectomy versus alternative chemical, laser, or surgical treatments for onychocryptosis. In addition, four non-comparative studies were identified regarding the safety of phenol matricectomy for the treatment of onychocryptosis. No evidence-based guidelines regarding the treatment of onychocryptosis were identified.

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, 2006 and August 25, 2016. 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>Patients (of any age) requiring treatment for onychocryptosis (ingrown toenail)</th>
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<tbody>
<tr>
<td>Intervention</td>
<td>Liquid phenol matricectomy</td>
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<td>Comparator</td>
<td>Q1: Alternative delivery of phenol for matricectomy (e.g., phenol swabs [Swab-It]); Alternative chemical matricectomy procedures (e.g., sodium hydroxide, trichloroacetic acid); Alternative surgical, laser, or electrosurgical treatments for onychocryptosis; Q2 to 4: No comparator required</td>
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<td>Outcomes</td>
<td>Q1: Clinical effectiveness (e.g., regrowth of nail spicule secondary to incomplete matricectomy); Q1 and 2: Harms (e.g., chemical burn, Meleney’s ulcer, wound complications, inflammation, discharge, nailbed infection, distal toe ischemia, bleeding); Q3: Evidence based guidelines regarding optimal treatment of onychocryptosis; Q4: Evidence-based guidelines regarding the use of phenol in the treatment of onychocryptosis</td>
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<td>Study Designs</td>
<td>Health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, non-randomized studies, evidence-based guidelines</td>
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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 systematic review, six randomized controlled trials, and five comparative, non-randomized studies were identified regarding the comparative clinical effectiveness of phenol matricectomy versus alternative chemical, laser, or surgical treatments for onychocryptosis. In addition, four non-comparative studies were identified regarding the safety of phenol matricectomy for the treatment of onychocryptosis. No evidence-based guidelines regarding the treatment of onychocryptosis were identified.

Additional references of potential interest are provided in the appendix.

Health Technology Assessments
No literature identified.
Systematic Reviews and Meta-analyses


Randomized Controlled Trials


Non-Randomized Studies

Comparative Studies – Clinical Effectiveness


Non-Comparative Studies – Safety Outcomes Only


Guidelines and Recommendations
No literature identified.
APPENDIX – FURTHER INFORMATION:

Non-Randomized Studies – Health Care Provider Exposure to Phenol


Guidelines with Unclear Methodology


Review Articles


Additional References
