Topical Antibiotics for the Treatment of Treatment-Resistant Impetigo: 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 use of topical antibiotics for the treatment of treatment-resistant impetigo?

2. What are the evidence-based guidelines regarding the treatment of treatment resistant impetigo?

Key Findings

One systematic review with meta-analyses, one non-randomized study, and one evidence-based guideline were identified regarding the clinical evidence regarding the use of topical antibiotics for the treatment of treatment-resistant impetigo.

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. The search was also limited to English language documents published between January 1, 2007 and September 25, 2018. 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>Adults and Children with Impetigo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intervention</td>
<td>Topical antibiotics (e.g. fusidic acid, mupirocin, bacitracin)</td>
</tr>
<tr>
<td></td>
<td>• Polymyxin B sulfate-bacitracin (Polysporin ointment)</td>
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<tr>
<td></td>
<td>• Polymyxin B sulfate-gramicidin (Polysporin cream)</td>
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<tr>
<td></td>
<td>• Polymyxin B sulfate-bacitracin-gramicidin (Polysporin triple ointment)</td>
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<tr>
<td></td>
<td>• Bacitracin (Bacitin ointment)</td>
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<tr>
<td></td>
<td>• Mupirocin (Bactroban cream/ointment)</td>
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<tr>
<td></td>
<td>• Silver sulfadiazine (Flamazine cream)</td>
</tr>
<tr>
<td></td>
<td>• Fusidic acid/fusidate sodium (Fucidin cream/ointment)</td>
</tr>
<tr>
<td></td>
<td>• Fusidic acid 2% plus hydrocortisone (Fucidin H)</td>
</tr>
<tr>
<td>Comparators</td>
<td>Q1: Other topical antibiotics; Other active treatments</td>
</tr>
<tr>
<td></td>
<td>Q2: No comparator</td>
</tr>
<tr>
<td>Outcomes</td>
<td>Q1: Resolution of impetigo, treatment resistance, effectiveness as first or second-line therapy</td>
</tr>
<tr>
<td></td>
<td>Q2: Guidelines regarding the order for which to use the antibiotics, guidelines regarding resistance, guidelines for treating impetigo that has been resistant to one or more treatments</td>
</tr>
<tr>
<td>Study Designs</td>
<td>Health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, non-randomized studies, evidence-based guidelines</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, non-randomized studies, and evidence-based guidelines.

One systematic review with meta-analyses, one non-randomized study, and one evidence-based guideline were identified regarding the clinical evidence regarding the use of topical antibiotics for the treatment of treatment-resistant impetigo. No relevant health technology assessments or randomized controlled trials 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

No literature identified.

Non-Randomized Studies


Guidelines and Recommendations

Appendix — Further Information

Previous CADTH Reports

Guidelines and Recommendations – Methodology Not Specified

Review Articles


Additional References
