Oral Neomycin in Preparation for Colorectal Procedures: Clinical Effectiveness, Cost-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 effectiveness of oral neomycin as part of preparation for colorectal procedures?

2. What is the cost-effectiveness of oral neomycin as part of preparation for colorectal procedures?

3. What are evidence-based guidelines informing the use of oral neomycin as part of preparation for colorectal procedures?

Key Findings

No literature was identified regarding oral neomycin as part of the preparation for colorectal procedures.

Methods

A limited literature search was conducted on key resources including Ovid Medline, Ovid Embase, PubMed, The Cochrane Library, University of York Centre for Reviews and Dissemination (CRD) databases and a focused Internet search. No methodological filters were applied to limit retrieval by publication type. The search was limited to English language documents published between January 1, 2013 and February 27, 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>Patients preparing to undergo colorectal procedures (e.g., planned procedures such as colonoscopy, hemicolecotomy, sigmoid colectomy, anterior resection – not emergency procedures where oral antibiotics and/or mechanical bowel preparation would not be possible)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intervention</td>
<td>Oral neomycin (i.e., used as part of preparation for colorectal procedures)</td>
</tr>
<tr>
<td>Comparator</td>
<td>Q1-2: Oral antibiotics other than neomycin (used as part of preparation for colorectal procedures e.g., kanamycin, or any viable alternatives for neomycin used in a Canadian context)</td>
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<tr>
<td></td>
<td>Q3: No comparator</td>
</tr>
<tr>
<td>Outcomes</td>
<td>Q1: Clinical effectiveness i.e., benefits (e.g., decreased postop infection) or harms (e.g., infection, anastomotic leak, intra-abdominal infections, ileus, repeat procedure, readmission)</td>
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<tr>
<td></td>
<td>Q2: Cost-effectiveness</td>
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<tr>
<td></td>
<td>Q3: Evidence-based guidelines</td>
</tr>
<tr>
<td>Study Designs</td>
<td>Health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, non-randomized studies, economic evaluations, 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, economic evaluations, and evidence-based guidelines.

No health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, non-randomized studies, economic evaluations, or evidence-based guidelines were identified regarding oral neomycin as part of the preparation for colorectal procedures.

References of potential interest are provided in the appendix.

Health Technology Assessments
No literature identified.

Systematic Reviews and Meta-analyses
No literature identified.

Randomized Controlled Trials
No literature identified.

Non-Randomized Studies
No literature identified.

Economic Evaluations
No literature identified.

Guidelines and Recommendations
No literature identified.
Appendix — Further Information

Systematic Reviews and Meta-Analyses – Neomycin Not Specified


Non-Randomized Studies

Mixed Intervention


Qualitative Study


Review Articles
