Title: Development of Antibiotic Resistance to Norfloxacin in the Treatment of Urinary Tract Infections: Clinical Evidence

Date: 5 February 2015

Research Question

What is the clinical evidence on the development of antibiotic resistance to norfloxacin in the treatment of urinary tract infections (UTIs)?

Key Findings

One non-randomized study was identified regarding the development of antibiotic resistance to norfloxacin in the treatment of urinary tract infections.

Methods

A limited literature search was conducted on key resources including PubMed, The Cochrane Library (2015, Issue 1), 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, 2005 and January 30, 2015. 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 with UTIs</th>
</tr>
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<tbody>
<tr>
<td>Intervention</td>
<td>Norfloxacin</td>
</tr>
<tr>
<td>Comparator</td>
<td>Other antibiotics (e.g., ciprofloxacin)</td>
</tr>
<tr>
<td>Outcomes</td>
<td>Development of antibiotic resistance</td>
</tr>
<tr>
<td>Study Designs</td>
<td>Health technology assessment, systematic reviews, meta-analyses, randomized controlled trials, non-randomized studies</td>
</tr>
</tbody>
</table>

UTI = urinary tract infection.

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 non-randomized study was identified regarding the development of antibiotic resistance to norfloxacin in the treatment of urinary tract infections. No relevant health technology assessments, systematic reviews, meta-analyses, 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
No literature identified.

Randomized Controlled Trials
No literature identified.

Non-Randomized Studies


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APPENDIX – FURTHER INFORMATION:

Non-Randomized Studies

Population Level Resistance Over Time


Alternate Outcome


Treatment Failure


Modelling Study