TITLE:   Bladder Instillation of Gentamicin for the Treatment of Recurrent Urinary Tract Infections: Clinical Evidence and Guidelines

DATE:    28 November 2013

RESEARCH QUESTIONS

1. What is the comparative clinical effectiveness of gentamicin treatment via bladder instillation versus intravenous gentamicin for the treatment of recurrent urinary tract infections?

2. What is the clinical evidence regarding the effectiveness and safety of gentamicin treatment administered via bladder instillation for the treatment of recurrent urinary tract infections?

3. What are the evidence-based guidelines regarding the use of gentamicin treatment administered via bladder instillation for the treatment of recurrent urinary tract infections?

KEY MESSAGE

One systematic review regarding the effectiveness and safety of gentamicin treatment administered via bladder instillation for the treatment of recurrent urinary tract infections was identified. No relevant comparative studies or evidence-based guidelines were identified.

METHODS

A limited literature search was conducted on key resources including PubMed, The Cochrane Library (2013, Issue 11), University of York Centre for Reviews and Dissemination (CRD) databases, Canadian and major international health technology agencies, as well as a focused Internet search. The search was also limited to English language documents published between January 1, 2008 and November 12, 2013. Internet links were provided, where available.

The summary of findings was prepared from the abstracts of the relevant information. Please note that data contained in abstracts may not always be an accurate reflection of the data contained within the full article.

Disclaimer: The Rapid Response Service is an information service for those involved in planning and providing health care in Canada. Rapid responses are based on a limited literature search and are not comprehensive, systematic reviews. The intent is to provide a list of sources of the best evidence on the topic that CADTH could identify using all reasonable efforts within the time allowed. Rapid responses should be considered along with other types of information and health care considerations. The information included in this response is not intended to replace professional medical advice, nor should it be construed as a recommendation for or against the use of a particular health technology. Readers are also cautioned that a lack of good quality evidence does not necessarily mean a lack of effectiveness particularly in the case of new and emerging health technologies, for which little information can be found, but which may in future prove to be effective. While CADTH has taken care in the preparation of the report to ensure that its contents are accurate, complete and up to date, CADTH does not make any guarantee to that effect. CADTH is not liable for any loss or damages resulting from use of the information in the report.

Copyright: This report contains CADTH copyright material and may contain material in which a third party owns copyright. This report may be used for the purposes of research or private study only. It may not be copied, posted on a web site, redistributed by email or stored on an electronic system without the prior written permission of CADTH or applicable copyright owner.

Links: This report may contain links to other information available on the websites of third parties on the Internet. CADTH does not have control over the content of such sites. Use of third party sites is governed by the owners’ own terms and conditions.
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 regarding the effectiveness and safety of gentamicin treatment administered via bladder instillation for the treatment of recurrent urinary tract infections was identified. No relevant health technology assessments, randomized controlled trials, non-randomized studies, or evidence-based guidelines were identified. Additional references of potential interest are provided in the appendix.

OVERALL SUMMARY OF FINDINGS

One systematic review\(^1\) was identified that examined the use of intravesical gentamicin for recurrent urinary tract infection in patients who underwent intermittent bladder catheterisation. The authors identified three case series that suggested a decrease in the number of UTIs experienced with the use intravesical gentamicin. No major adverse events were reported in the review but the follow-up period of the studies was limited. Authors concluded that intravesical gentamicin may be an appropriate treatment option for this patient population.

No relevant comparative studies or evidence-based guidelines were identified.
REFERENCES SUMMARIZED

Health Technology Assessments
No literature identified.

Systematic Reviews and Meta-analyses


Randomized Controlled Trials
No literature identified.

Non-Randomized Studies
No literature identified.

Guidelines and Recommendations
No literature identified.

PREPARED BY:
Canadian Agency for Drugs and Technologies in Health
Tel: 1-866-898-8439
www.cadth.ca
APPENDIX – FURTHER INFORMATION:

Clinical Guidelines


Evidence-based Guidelines – prevention of catheter associated infections


Case Studies


Ongoing Clinical Trials