TITLE: Antibacterial Sutures for Wound Closure After Surgery: Update on Clinical Effectiveness and Guidelines for Use

DATE: 01 April 2014

RESEARCH QUESTIONS

1. What is the clinical effectiveness of antibacterial sutures for the prevention of surgical site infections?

2. What are the adverse events associated with antimicrobial suture use, including the development of drug-resistant bacteria?

3. What are the guidelines for using antimicrobial sutures for wound closure?

4. What is the cost-effectiveness of using antimicrobial sutures for wound closure?

KEY MESSAGE

Three systematic reviews, three randomized controlled trials, and three non-randomized studies were identified regarding the clinical effectiveness of or adverse events associated with antibacterial sutures for the prevention of surgical site infections.

METHODS

A limited literature search was conducted on key resources including PubMed, The Cochrane Library (2014, Issue 3), University of York Centre for Reviews and Dissemination (CRD) databases, Canadian and major international health technology agencies, as well as a focused Internet search. Where possible, retrieval was limited to the human population. The search was also limited to English language documents published between April 1, 2013 and March 25, 2014.
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.

Three systematic reviews, three randomized controlled trials, and three non-randomized studies were identified regarding the clinical effectiveness of or adverse events associated with antibacterial sutures for the prevention of surgical site infections. No health technology assessments, economic evaluations, or evidence-based guidelines 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


Economic Evaluations
No literature identified.

Guidelines and Recommendations
No literature identified.

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APPENDIX – FURTHER INFORMATION:

Randomized Controlled Trials – Antiseptic-coated Sutures


Additional References