TITLE: Injectable and Topical Antibiotics for the Eye: Clinical Effectiveness

DATE: 22 February 2010

RESEARCH QUESTIONS:

1. What is the clinical effectiveness of injectable and topical antibiotics for the eye?
2. What are the guidelines for use of injectable and topical antibiotics for the eye?

METHODS:

A literature search for specific antibiotics used in ophthalmology as well as general guidelines or systematic reviews of all antibiotics used in eyes, was conducted on key health technology assessment resources, including PubMed, the Cochrane Library (Issue 1, 2010), University of York Centre for Reviews and Dissemination (CRD) databases, ECRI, EuroScan, international health technology agencies, and a focused Internet search. The search was limited to English language articles published between 1995 and February 2010. Filters were applied to limit the retrieval to health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, controlled clinical trials, observational studies, and guidelines. Internet links were provided, where available.

This is a companion report to a previous HTIS report entitled: Injectable and Topical Antimicrobials for the Eye: Clinical Effectiveness. Articles that were included in the previous report are not included in the current report. For this companion report, inclusion was limited to general guidelines or systematic reviews on antibiotic use in ophthalmology or abstracts which referred to use of the following antibiotics in the preoperative or intraoperative setting: ceftazidime, vancomycin, cefazolin, gentamicin, or tobramycin. The search for the initial report was limited, whereas the search for the current report was more broad to capture additional articles.

RESULTS:

HTIS 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, controlled clinical trials, observational studies, economic evaluations, and evidence-based guidelines.

Fourteen randomized controlled trials, two controlled clinical trials, one observational study, and two evidence-based guidelines were identified pertaining to the use of injectable and topical antibiotics for the eye when given in an in-hospital setting. No relevant health technology assessment reports or systematic reviews were identified. Additional information that may be of interest has been included in the appendix.

**Health technology assessments**
No literature identified.

**Systematic reviews and meta-analyses**
No literature identified.

**Randomized controlled trials**


**Controlled clinical trials**


**Observational studies**

Guidelines and recommendations


See page S22: Antibiotics


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APPENDIX – FURTHER INFORMATION:

Randomized controlled trials- timing of treatment with antibiotics unclear


Observational studies


Guidelines and policy statements


