
DATE: 20 March 2012

RESEARCH QUESTIONS

1. What is the clinical effectiveness of intracameral antibiotics for the prevention of endophthalmitis post-cataract surgery?

2. What is the cost-effectiveness of intracameral antibiotics for the prevention of endophthalmitis post-cataract surgery?

3. What are the evidence-based guidelines and recommendations for the use and preparation of intracameral antibiotics?

KEY MESSAGE

Evidence was identified pertaining to the clinical effectiveness of intracameral antibiotics for the prevention of endophthalmitis post-cataract surgery. No relevant evidence was identified for the cost-effectiveness or evidence-based guidelines for intracameral antibiotics in cataract surgery.

METHODS

A limited literature search was conducted on key resources including PubMed, The Cochrane Library (2012, Issue 2), University of York Centre for Reviews and Dissemination (CRD) databases, Canadian and abbreviated list of major international health technology agencies, as well as a focused Internet search. No methodological filters were applied to limit retrieval by study type. Where possible, retrieval was limited to the human population. The search was also limited to English language documents published between July 1, 2010 and March 5, 2012. 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.

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.

Two randomized controlled trials and two non-randomized studies were identified that examined the clinical effectiveness of intracameral antibiotics for the prevention of endophthalmitis post-cataract surgery. No relevant health technology assessments, meta-analyses, systematic reviews, economic evaluations, or evidence-based guidelines were identified pertaining to intracameral antibiotics for the prevention of endophthalmitis post-cataract surgery. Additional references of potential interest are provided in the appendix.

OVERALL SUMMARY OF FINDINGS

One randomized controlled trial (RCT)\(^1\) assessed prophylactic treatment with cefuroxime compared to moxifloxacin for the prevention of acute post-operative endophthalmitis in patients following cataract surgery. The study found that 1% of patients that received prophylactic cefuroxime developed post-operative endophthalmitis compared to 0% of patients in the moxifloxacin arm. The second RCT\(^2\) examined intracameral triamcinolone acetonide and gentamicin injections compared with dexamethasone and tobramycin combination eye drops in cataract surgery patients for the prevention of inflammation following cataract surgery. Endophthalmitis was not observed in any patients in either treatment arm.

Two non-randomized studies\(^3,4\) evaluated the rate of endophthalmitis following cataract surgery with prophylactic intracameral cefazolin treatment compared to no prophylactic treatment. In one study\(^3\), the rate of postoperative endophthalmitis in the no treatment cohort was 0.63% while the rate was 0.05% in the cefazolin cohort. In the second study\(^4\), the rate of postoperative endophthalmitis in the no treatment cohort was 0.064% while the rate in the cefazolin cohort was 0.01%. These studies demonstrate that the rate of postoperative endophthalmitis was reduced for patients that received cefazolin at the conclusion of cataract surgery.
REFERENCES SUMMARIZED

Health Technology Assessments
No literature identified.

Systematic Reviews and Meta-analyses
No literature identified.

Randomized Controlled Trials


Non-Randomized Studies


Economic Evaluations
No literature identified.

Guidelines and Recommendations
No literature identified.

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APPENDIX – FURTHER INFORMATION:

Review Articles


