TITLE: Administration of Anesthesia by Anesthesiologists Versus Non-Physicians for Patients Undergoing Cataract Surgery: Clinical Effectiveness, Cost-Effectiveness, and Guidelines

DATE: 22 April 2013

RESEARCH QUESTIONS

1. What is the clinical evidence regarding the administration of anesthesia by anesthesiologists versus non-physicians for patients undergoing cataract surgery?

2. What is the cost-effectiveness regarding the administration of anesthesia by anesthesiologists versus non-physicians for patients undergoing cataract surgery?

3. What are the evidence-based guidelines regarding the administration of anesthesia by anesthesiologists versus non-physicians for patients undergoing cataract surgery?

KEY MESSAGE

One non-randomized study and one evidence-based guideline were identified regarding the administration of anesthesia by anesthesiologists versus non-physicians for patients undergoing cataract surgery.

METHODS

A limited literature search was conducted on key resources including PubMed, The Cochrane Library (2013, 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. No filters were applied to limit the retrieval to study type. Where possible, retrieval was limited to the human population. The search was also limited to English language documents published between January 1, 2006 and April 12, 2013. Internet links were provided, where available.

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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.

One non-randomized study and one evidence-based guideline were identified regarding the utilization of anesthesiologists versus non-physicians providing anesthetic care during cataract surgery. No relevant health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, or economic analyses were identified. Additional references of potential interest are provided in the appendix.

OVERALL SUMMARY OF FINDINGS

In the included non-randomized study,\(^1\) patients undergoing outpatient cataract surgery were put under conscious sedation by an anesthesiologist or a surgical nurse. There were no significant differences in surgical complications, patient comfort, or patient satisfaction between the two groups.

A British guideline\(^2\) for anesthesia during ophthalmic surgery recommends that local orbital blocks be administered by an anesthesiologist or surgical ophthalmologist. For uncomplicated procedures, properly trained non-medical staff may administer subconjunctival or sub-Tenon’s blocks. An anesthesiologist should be available on site when local anesthetic blocks are being administered for more complex or longer cataract procedures.
REFERENCES SUMMARIZED

Health Technology Assessments
No literature identified.

Systematic Reviews and Meta-analyses
No literature identified.

Randomized Controlled Trials
No literature identified.

Non-Randomized Studies

Economic Evaluations
No literature identified.

Guidelines and Recommendations
See: 6.3 Who Should Administer LA? page 18 and 6.4.4 Staff and monitoring requirements for each LA technique, page 20

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APPENDIX – FURTHER INFORMATION:

Non-Randomized Studies – anesthesiologist administered, nurse or respiratory therapist monitored


Clinical Guidelines

Anesthesia provider not specified


Systematic methodology unclear
