TITLE: Ibuprofen and Acetaminophen: Clinical-Effectiveness and Guidelines

DATE: 01 April 2009

RESEARCH QUESTIONS:

1. What is the evidence for the use of ibuprofen in infants for fever and pain management over acetaminophen?

2. What is the clinical-effectiveness of ibuprofen versus acetaminophen for the treatment of dental abscesses?

3. What are the guidelines for indications of use of ibuprofen and acetaminophen?

METHODS:

A limited literature search was conducted on key health technology assessment resources, including PubMed, the Cochrane Library (Issue 1, 2009), University of York Centre for Reviews and Dissemination (CRD) databases, ECRI, EuroScan, international health technology agencies, and a focused Internet search. Results include articles published between 2004 and March 2009, and are limited to English language publications only. For questions #1 and #2, no filters were applied to limit the retrieval by study type. For question #3, filters were applied to limit the retrieval to guidelines. Internet links are provided, where available.

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, and evidence-based guidelines.

Two relevant randomized controlled trials and one observational study were identified pertaining to the evidence for the use of ibuprofen in infants for fever and pain management. No relevant health technology assessment reports, systematic reviews, meta-analyses, or controlled clinical
trials were identified. No relevant literature was identified regarding the clinical-effectiveness of ibuprofen versus acetaminophen for the treatment of dental abscesses. No evidence-based guidelines for the general indications of use of ibuprofen and acetaminophen were identified. Of note, the 1998 Canadian Paediatric Society Guidelines for acetaminophen and ibuprofen use in children are currently under revision. 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
No literature identified

Observational studies


Guidelines and recommendations
No literature identified.

PREPARED BY:
Kristen Moulton, BA, Research Assistant
Charlene Argáez, MLIS, Information Specialist
Health Technology Inquiry Service
Email: htis@cadth.ca
Tel: 1-866-898-8439
APPENDIX – FURTHER INFORMATION:

Systematic reviews and meta-analyses – unknown if infants included


Randomized controlled trials


Additional references
