TITLE: Codeine and Acetylsalicylic Acid for the Management of Post-Tonsillectomy or Adenoidectomy Pain: A Review of the Clinical Evidence

DATE: 20 June 2013

CONTEXT AND POLICY ISSUES

Tonsils are lymphoid tissues located at the back of the throat, while adenoids are made of tissue located at the back of the nose near the throat (nasopharynx). Recurrent infections may cause enlargement of these tissues that can block the airway passage.1 Surgical removal of the tonsils (tonsillectomy) and surgical removal of the adenoids (adenoidectomy) can be performed to treat long-term infections and/or obstructive sleep apnea.2,3 Bleeding, either immediate or delayed, is one of the complications of those procedures.1

Opioid and non-opioid analgesics have been used for outpatient management of pain following tonsillectomy and/or adenoidectomy in children.4 A combination of acetaminophen and codeine has been shown to be superior to acetaminophen alone in the management of post-surgical pain,5 and is widely used to manage pain in children following tonsillectomy and/or adenoidectomy. However, Health Canada has recently stated6 that they are no longer recommending codeine-containing prescription pain products for use in children less than 12 years of age. Some evidence indicates that there is an increased risk of respiratory depression and death in some children when codeine is used to manage pain following tonsillectomy and/or adenoidectomy.7,8 Non-steroidal anti-inflammatory drugs (NSAIDs) such as ibuprofen can be used for pain control, while the use of acetylsalicylic acid (ASA) and ketorolac may be associated with increased bleeding.4,9 The findings of a recent systematic review showed that NSAIDs did not result in any increase in bleeding in pediatric tonsillectomy.10 The NSAIDs in the review included ketoprofen, ketorolac, ibuprofen, diclofenac, rofecoxib and tenoxicam.10 However, ASA was not found among the NSAID products in the recent systematic review.10

The purpose of this review is to examine the clinical evidence regarding harms, particularly on bleeding, associated with the use of combination of codeine and acetylsalicylic acid for the management of pain following tonsillectomy and/or adenoidectomy.

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RESEARCH QUESTION

What is the clinical evidence regarding the harms (bleeding) associated with the use of the combination of codeine and ASA for the management of pain following tonsillectomy or adenoidectomy?

KEY FINDINGS

No relevant literature was identified regarding the risk of bleeding associated with the use of codeine and ASA combination for the management of pain following tonsillectomy or adenoidectomy

METHODS

Literature Search Strategy

A limited literature search was conducted on key resources including PubMed, Ovid EMBASE, The Cochrane Library (2013, Issue 4), 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 by study type. Where possible, retrieval was limited to the human population. The search was also limited to English language documents published before May 31, 2013.

Selection Criteria and Methods

One reviewer screened the titles and abstracts of the retrieved publications and examined the full-text publications for the final article selection. Selection criteria are outlined in Table 1.

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<th>Table 1: Selection criteria</th>
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<td><strong>Study Designs</strong></td>
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Exclusion Criteria

Articles were excluded if they did not meet the selection criteria in Table 1.
SUMMARY OF EVIDENCE

Quantity of Research Available

The literature search yielded 2 citations. No additional study was identified by searching the grey literature. After screening the abstracts, no relevant studies were selected for full-text review.

The PRISMA flowchart in Appendix 1 details the process of the study selection.

CONCLUSIONS AND IMPLICATIONS FOR DECISION OR POLICY MAKING

No relevant literature was identified; therefore, no conclusions or implications for decision or policy making can be presented regarding the use of the combination of codeine and ASA for the management of pain following tonsillectomy or adenoidectomy in children.

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REFERENCES


APPENDIX 1: Selection of Included Studies

2 citations identified from electronic literature search and screened

2 citations excluded

0 potentially relevant articles retrieved for scrutiny (full text, if available)

0 potentially relevant reports retrieved from other sources (grey literature, hand search)

0 potentially relevant reports

0 reports excluded

0 reports included in review