



TITLE: Optimal Post-Tonsillectomy Pain Management for Pediatric Patients: Clinical Evidence and Guidelines

DATE: 04 October 2012

RESEARCH QUESTIONS

1. What is the clinical evidence regarding optimal post-tonsillectomy pain management options for pediatric patients?
2. What are the evidence-based guidelines regarding post-tonsillectomy pain management for pediatric patients?

KEY MESSAGE

Two clinical studies and one evidence-based guideline were identified regarding post-tonsillectomy pain management options for pediatric patients.

METHODS

A limited literature search was conducted on key resources including MEDLINE, PubMed, The Cochrane Library (September 2012), 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 between January 1, 2007 and Sept 20 2012.

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.

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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, and evidence-based guidelines.

One randomized controlled trial, one non-randomized study, and one evidence-based guideline were identified regarding optimal post-tonsillectomy pain management options for pediatric patients. No relevant health technology assessments, systematic reviews, or meta-analyses were identified. Additional references of potential interest, including information for parental education on pain management, are provided in the appendix.

OVERALL SUMMARY OF FINDINGS

One randomized controlled trial¹ compared rofecoxib to hydrocodone with acetaminophen elixir for post-tonsillectomy analgesia after hospital discharge. Active pain scores were significantly reduced for patients taking rofecoxib versus the hydrocodone mixture after surgery. One non-randomized study² compared the efficacy and safety of rofecoxib-morphine with acetaminophen-morphine for post-tonsillectomy pain control. Pain scores were significantly reduced in the rofecoxib group and no side effects were reported. The authors of both studies suggested COX-2 inhibitors may be used for post-tonsillectomy pain relief in children.^{1,2}

One evidence-based guideline³ regarding the post-tonsillectomy care of children was identified. The guideline suggests advocating for pain management after surgery and that caregivers should be educated regarding the importance of managing and reassessing pain levels once at home. No recommendations are made regarding specific drugs for managing post-tonsillectomy pain.

REFERENCES SUMMARIZED

Health Technology Assessments

No literature identified.

Systematic Reviews and Meta-analyses

No literature identified.

Randomized Controlled Trials

1. Bean-Lijewski JD, Kruitbosch SH, Hutchinson L, Browne B. Post-tonsillectomy pain management in children: can we do better? *Otolaryngol Head Neck Surg.* 2007 Oct;137(4):545-51.
[PubMed: PM17903568](#)

Non-Randomized Studies

2. Vallee E, Carignan M, Lafrenaye S, Dorion D. Comparative study of acetaminophen-morphine versus rofecoxib-morphine for post-tonsillectomy pain control. *J Otolaryngol.* 2007 Oct;36(5):264-9.
[PubMed: PM17963664](#)

Guidelines and Recommendations

3. Baugh RF, Archer SM, Mitchell RB, Rosenfeld RM, Amin R, Burns JJ, et al. Clinical practice guideline: tonsillectomy in children. *Otolaryngol Head Neck Surg.* 2011 Jan;144(1 Suppl):S1-30.
[PubMed: PM21493257](#)
<http://guidelines.gov/content.aspx?f=rss&id=25313>

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APPENDIX – FURTHER INFORMATION:

Randomized Controlled Trials

Patient population unclear

4. Inci N, Basut O, Kasapoglu F, Coskun H. Management of pain after tonsillectomy: a prospective, randomized clinical study. *Kulak Burun Bogaz Ihtis Derg.* 2009 Jan;19(1):1-8.
[PubMed: PM19793040](#)

Parental education regarding pain management

5. Sutters KA, Miaskowski C, Holdridge-Zeuner D, Waite S, Paul SM, Savedra MC, et al. A randomized clinical trial of the efficacy of scheduled dosing of acetaminophen and hydrocodone for the management of postoperative pain in children after tonsillectomy. *Clin J Pain.* 2010 Feb;26(2):95-103. Available from:
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2920618>
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[PubMed: PM19128627](#)
8. Unsworth V, Franck LS, Choonara I. Parental assessment and management of children's postoperative pain: a randomized clinical trial. *J Child Health Care.* 2007 Sep;11(3):186-94.
[PubMed: PM17709354](#)

Review Articles

9. Isaacson G. Tonsillectomy care for the pediatrician. *Pediatrics.* 2012 Aug;130(2):324-34.
[PubMed: PM22753552](#)
10. Raeder J. Ambulatory anesthesia aspects for tonsillectomy and abrasion in children. *Curr Opin Anaesthesiol.* 2011 Dec;24(6):620-6.
[PubMed: PM21897214](#)

Additional References

11. Sadhasivam S, Myer CM, III. Preventing opioid-related deaths in children undergoing surgery. *Pain Med.* 2012 Jul;13(7):982-3.
[PubMed: PM22694279](#)

12. Sutters KA, Savedra MC, Miaskowski C. The pediatric PRO-SELF[®]: pain control program: an effective educational program for parents caring for children at home following tonsillectomy. *J Spec Pediatr Nurs.* 2011 Oct;16(4):280-94.
[PubMed: PM21951354](#)