

The Hierarchy of Evidence



The Hierarchy of evidence is based on summaries from the National Health and Medical Research Council (2009), the Oxford Centre for Evidence-based Medicine Levels of Evidence (2011) and Melynyk and Fineout-Overholt (2011).

- I Evidence obtained from a systematic review of all relevant randomised control trials.
- II Evidence obtained from at least one well designed randomised control trial.
- III Evidence obtained from well-designed controlled trials without randomisation.
- IV Evidence obtained from well designed cohort studies, case control studies, interrupted time series with a control group, historically controlled studies, interrupted time series without a control group or with case- series
- V Evidence obtained from systematic reviews of descriptive and qualitative studies
- VI Evidence obtained from single descriptive and qualitative studies
- VII Expert opinion from clinicians, authorities and/or reports of expert committees or based on physiology

Melynyk, B. & Fineout-Overholt, E. (2011). Evidence-based practice in nursing & healthcare: A guide to best practice (2nd ed.). Philadelphia: Wolters Kluwer, Lippincott Williams & Wilkins.

National Health and Medical Research Council (2009). NHMRC levels of evidence and grades for recommendations for developers of guidelines (2009). Australian Government: NHMRC. http://www.nhmrc.gov.au/_files_nhmrc/file/guidelines/evidence_statement_form.pdf

OCEBM Levels of Evidence Working Group Oxford (2011).The Oxford 2011 Levels of Evidence. Oxford Centre for Evidence-Based Medicine. <http://www.cebm.net/index.aspx?o=1025>

Databases searched:	<input checked="" type="checkbox"/> CINAHL (Ebsco)	<input checked="" type="checkbox"/> Medline (Ebsco)	<input type="checkbox"/> Pubmed (NLM)	<input type="checkbox"/> Nursing (Ovid)	<input type="checkbox"/> Emcare (Ovid)	<input type="checkbox"/> Other List: _____
Keywords used:	Tonsillectomy, Adenoidectomy, Paediatrics, Postoperative pain, Postoperative care					
Search limits:	5 years					
Other search comments:						

Reference (include title, author, journal title, year of publication, volume and issue, pages)	Evidence level (I-VII)	Key findings, outcomes or recommendations
<p>Mitchell RB, Archer SM, Ishman SL, et al. Clinical Practice Guideline: Tonsillectomy in Children (Update). Otolaryngology–Head and Neck Surgery. 2019;160:S1-S42</p>	I	<p>Education in regards to post tonsillectomy pain should be commenced as part of perioperative education and counselling and reinforced at the time of surgery, children <3 should be monitored overnight as an inpatient, either acetaminophen or ibuprofen (or both) should be given for pain relief.</p>
<p>Hannam, JA, Anderson, BJ & Potts, P. Acetaminophen, ibuprofen, and tramadol analgesic interactions after adenotonsillectomy. Pediatric Anesthesia. 2018;28:841-851</p>	II	<p>The addition of tramadol to the combination of acetaminophen and ibuprofen prolongs the analgesia duration</p>
<p>Richards, J, Lang, M, Andresen, E et al. Impact of paediatric tonsillectomy perioperative management on pain, nausea and recovery: A prospective cohort study. Journal of Paediatrics and Child Health. 2020, 144-122</p>	IV	<p>Parents felt unprepared for the amount and duration of apain the child experienced postoperatively. Enhanced parental pre-operative education focusing on pain management may benefit children’s outcomes</p>
<p>Gray, WK, Takhar, AS, Navaratnam, AV et al. Safety of day-case paediatric tonsillectomy in England: an analysis of administrative data for the Getting It Right First Time programme. Anaesthesia. 2022; 77:277-285</p>	IV	<p>Outcomes for day-case and overnight stay tonsillectomy are similar. Specialist centres should aim for day case rates of >70%</p>
<p>Tan, L, Carachi, P & Anderson, BJ. The time course of pain after tonsillectomy. Pediatric Anesthesia. 2020; 30:1051-1053</p>	III	<p>Paracetamol and Ibuprofen use together achieves a more rapid onset of analgesia with a longer duration. Children having combination therapy of paracetamol and ibuprofen still required breakthrough pain relief in the form of tramadol.</p>
<p>Stokes, P, Guirguis, M & Page, D. The analgesic efficacy of cyclooxygenase-2 selective inhibitors in paediatric adenotonsillectomy: a systematic review. Australian Journal of Otolaryngology. 2018;1:16</p>	I	<p>Current data remains scarce and poor surrounding the efficacy of COX-2 inhibitors in post-operative paediatric adenotonsillectomy analgesia.</p>