TONSILLECTOMY

SUMMARY RECOMMENDATIONS

Notes on PROSPECT recommendations

PROSPECT provides clinicians with supporting arguments for and against the use of various interventions in postoperative pain based on published evidence and expert opinion. Clinicians must make judgements based upon the clinical circumstances and local regulations. At all times, local prescribing information for the drugs referred to must be consulted.

Grades of recommendation (GoR) and levels of evidence (LoE)

GoRs are assigned according to the overall LoE on which the recommendations are based, which is determined by the quality and source of evidence: Relationship between quality and source of evidence, levels of evidence and grades of recommendation.

Notes on pain after tonsillectomy

Tonsillectomy is one of the most frequently performed surgical procedures and pain management remains challenging. It has been identified as one of the most painful surgical procedures (Gerbershagen 2013), probably because pain remains poorly managed in clinical practice (Gerbershagen 2013; Maier 2010; Persino 2017). Tonsillectomy is unique for several reasons including the type of tissue trauma; the exposure of the healing wound to movement of the pharynx during ingestion; the risk of bleeding and limitations in the choice of drugs, particularly in children.

The aim of this procedure-specific guideline is to provide clinicians with up-to-date evidence for optimal pain management in tonsillectomy, and recommendations made based on this evidence, adverse effects and considerations regarding risks of interventions.

Although other guidelines for tonsillectomy pain management are available (Ericsson 2015; Paganelli 2014), none have used the PROSPECT methodology to critically evaluate the available literature. This includes a systematic evidence-based approach, the inclusion of a basic analgesic regimen for efficacy evaluation, a balance between efficacy and safety and a Delphi process for the final recommendations with an international group of anaesthetists and surgeons involved.

Summary recommendations

Recommended: Pre- and intra-operative interventions • Unless otherwise stated, 'pre-operative' refers to interventions applied before surgical incision and 'intra-operative' refers to interventions applied after incision and before wound closure • Analgesics should be administered at the appropriate time (pre- or intra-operatively) to provide sufficient analgesia in the early recovery period	
Paracetamol and NSAIDs	• The basic analgesic regimen should include paracetamol (Grade D) and non-steroidal anti-inflammatory drugs (NSAIDs) (Grade A) administered pre-operatively or intra-operatively and continued postoperatively.
Intravenous dexamethasone	• A single dose of intravenous dexamethasone is recommended (Grade A) for its analgesic and anti-emetic effects.
Analgesic adjuncts	
Acupuncture	• Intra-operative and postoperative acupuncture is recommended as an analgesic adjunct (Grade B).
Considered when first-line analgesics are contraindicated	
Gabapentinoids	• Pre-operative gabapentinoids may be considered in patients with contra-indications to the basic analgesic regimen.
Dexmedetomidine	• Intra-operative dexmedetomidine may be considered in patients with contra-indications to the basic analgesic regimen.
Ketamine	• Intra-operative intravenous ketamine (only in children) may be considered in patients with contra-indications to the basic analgesic regimen. ○ It should be administered at the beginning of the surgical procedure as a single intravenous dose.

Recommended: Post-operative interventions • Unless otherwise stated, 'postoperative' refers to interventions applied at or after wound closure • Analgesics should be administered at the appropriate time (pre- or intra-operatively) to provide sufficient analgesia in the early recovery period	
Paracetamol and NSAIDs	• The basic analgesic regimen should include paracetamol (Grade D) and non-steroidal anti-inflammatory drugs (NSAIDs) (Grade A) administered pre-operatively or intra-operatively and continued postoperatively.
Opioids	• Opioids should be reserved as rescue analgesics in the postoperative period (Grade D).
Analgesic adjuncts	
Honey	• Postoperative honey is recommended as an analgesic adjunct (Grade B).
Acupuncture	• Intra-operative and postoperative acupuncture is recommended as an analgesic adjunct (Grade B).

Interventions that are NOT recommended

Analgesic interventions that are not recommended for pain management in patients undergoing tonsillectomy.

	Intervention	Reason for not recommending
Pre- and intra-operative	Peritonsillar infiltration or topical application of local anaesthetics	Evidence of a short-lasting effect but concerns of serious side effects
	Oral or topical ketamine	Limited procedure-specific evidence
	Lidocaine spray	Lack of procedure-specific evidence
	Magnesium sulphate	Lack of procedure-specific evidence
	Tramadol infiltration	Lack of procedure-specific evidence
Postoperative	Dexamethasone	Lack of procedure-specific evidence

Overall PROSPECT recommendations

Overall recommendations for pain management in patients undergoing tonsillectomy.

Recommendations for pain management in tonsillectomy	
Pre-operative and intra-operative interventions	• Paracetamol (Grade D) • Non-steroidal anti-inflammatory drugs (Grade A) • Dexamethasone intravenously (Grade A) • Pre-operative gabapentinoids, or intra-operative ketamine (for children), or intra-operative dexmedetomidine may be considered, when basic analgesic regimen is contraindicated • Analgesic adjuncts: acupuncture (Grade B)

Postoperative interventions	• Paracetamol (Grade D)
	• Non-steroidal anti-inflammatory drugs (Grade A)
	• Opioid for rescue (Grade D)
	• Analgesic adjuncts:
	  ○ Acupuncture (Grade B)
	  ○ Honey (Grade B)