



Opioids and Pain in Youth:

A toolkit for health professionals

This toolkit shares evidence-based solutions to help you and your patients.

Whether safely prescribing opioids, exploring alternative therapies,
or providing informed education, your efforts matter!

#ItDoesntHaveToHurt



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Perioperative Pain

Overview

When a child or youth needs surgery, they will almost always be administered opioids during the surgery to manage the pain associated with their procedure. Almost 80% of these patients experience postoperative pain, with 80% of them reporting moderate to severe pain*.

*Boric et al. 2017. <https://doi.org/10.1111/pan.13203>

As such, children and youth may require opioids after surgery for their postoperative pain. Judicious use of opioids can help reduce discomfort, shorten time of hospitalization, lower hospital costs, and increase patient satisfaction. In contrast, inadequate postoperative pain treatment is associated with delayed wound healing and the development of chronic pain in the future.

This toolkit section includes resources for safely and responsibly prescribing and administering opioids for perioperative pain in children and youth.

When opioids are prescribed and administered for postoperative pain, there are several considerations to ensure safer therapeutic use:

- **Inadequate management of postoperative pain** may lead to development of complications and prolonged recovery time, with increased morbidity and mortality
- **Physical** (e.g., ice, splinting) and **psychological** (e.g., music therapy, child life specialist involvement) treatments should be used for all children and youth with post-operative pain
- **Non-opioid medications** (e.g., ketorolac, diclofenac, other NSAIDs) should be used as first-line pharmacologic therapies
- **Systemic opioid prescribing can be decreased** with judicious use of regional anesthesia, for certain procedures and surgeries
- **Opioid analgesia (both oral and parenteral)** should be combined with non-opioid medications such as ketorolac or acetaminophen to ensure that only the lowest dose of opioids is used
- **Opioid analgesia should be used for as short of a time as possible.** As soon as a child's pain is better managed, they should be transitioned to an alternative non-opioid pharmacologic treatment
- **Children and their families should always be counselled** about the potential side effects of opioid medications
- **Potential risks for higher-risk opioid use** should be assessed using a validated risk assessment tool before prescribing or administering opioid analgesia

Opioids should be prescribed and administered in a culturally safe way.

Also consider risks for opioid use disorder, higher-risk opioid use, child age, and pre-existing mental health diagnoses.

However, even when these risks are present, **children with severe pain have the right to adequate pain management, which may include the use of opioids.** Children and their families should share the decision-making about whether opioid analgesia is appropriate for them with their healthcare provider.

Definition of perioperative pain:

Pain related to or that occurs around the time of a surgical procedure. Effectively managing perioperative pain is essential for optimizing pediatric surgical health outcomes and preventing the development of chronic pain after surgery.

Birnie et al. 2022.

<https://www.tandfonline.com/doi/full/10.1080/24740527.2022.2038031>

“Acute pain after surgery is common, ranging from moderate to severe, and often goes undertreated. This can lead to delayed recovery, longer hospital stays, and is linked to chronic post-surgical pain, a devastating and expensive public health concern. Post-surgical pain should be treated with non-opioid medications, alongside physical and psychological strategies – but when these approaches fall short in providing comfort, children should receive opioids as a critical component of pain care. Hopefully this toolkit will help in the quest to provide proper pain management for children. It doesn’t have to hurt!”

~ Dr. Fiona Campbell, Physician



Statements and Guidelines

Clinical practice guidelines for pain management after tonsillectomy: Systematic quality appraisal using the AGREE II instrument

Barrette L-X, et al. International Journal of Pediatric Otorhinolaryngology. 2022

[View guideline](#) *subscription-based access

Guidelines for Opioid Prescribing in Children and Adolescents After Surgery: An Expert Panel Opinion

Kelley-Quon LI, et al. JAMA Surgery. 2021

[View guideline](#) *subscription-based access

PROSPECT guideline for tonsillectomy: systematic review and procedure-specific postoperative pain management recommendations

Aldamluji N, et al. Anaesthesia. 2020

[View guideline](#)

Revision of expert panel's guidelines on postoperative pain management

Aubrun F, et al. Anaesthesia Critical Care & Pain Medicine. 2019

[View recommendations](#)

Postoperative pain management in children: Guidance from the pain committee of the European Society for Paediatric Anaesthesiology (ESPA Pain Management Ladder Initiative)

Vittinghof M, et al. Pediatric Anesthesia. 2018.

[View recommendations](#)

Review Articles

Assessment and management of pain in pediatric otolaryngology

Rodriguez M. International Journal of Pediatric Otorhinolaryngology. 2016

[Access article](#) *subscription-based access

Strategies for preventing side effects of systemic opioid in postoperative pediatric patients

Jitpakdee T & Mande S. Pediatric Anesthesia. 2014

[Access article](#) *subscription-based access

Opioid-sparing effects of perioperative paracetamol and nonsteroidal anti-inflammatory drugs (NSAIDs) in children

Wong I, et al. Pediatric Anesthesia. 2013

[Access article](#)

Youth and Family Resources

L'analgesie contrôlée par le patient (ACP) pour le soulagement de la douleur

CHU Sainte-Justine. 2019

Découvrez comment l'analgesie contrôlée par le patient (ACP) et l'analgesie contrôlée par le personnel infirmier (ACPI) peuvent soulager votre enfant de douleurs graves de courte durée à l'hôpital.

[View PDF](#)

Opioids for Pain after Surgery

Institute For Safe Medication Practices. 2018

Answers to common questions about opioids for pain after surgery.

[View PDF](#)

Les opioïdes pour la douleur après la chirurgie : réponses à vos questions

L'Institut pour la sécurité des médicaments. 2018

Answers to common questions about opioids for pain after surgery.

[View PDF](#)

Additional Resources

Prescription Patterns, Associated Factors, and Outcomes of Opioids for Operative Foot and Ankle Fractures: A Systematic Review

Badin D, et al. Clinical Orthopaedics and Related Research. 2022

[Access article](#) *subscription-based access

Opioid Prescription and Usage in Adolescents Undergoing Orthopaedic Surgery in the United States: A Systematic Review

Dautremont E, et al. JB&JS Reviews. 2017

[Access article](#) *subscription-based access

How to replace codeine after tonsillectomy in children under 12 years of age? Guidelines of the French Oto-Rhino-Laryngology – Head and Neck Surgery Society (SFORL)

Constant I, et al. European Annals of Otorhinolaryngology, Head and Neck Diseases. 2014

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A Meta-Analysis of the Use of Nonsteroidal Anti-inflammatory Drugs for Pediatric Postoperative Pain

Michelet D, et al. Anesthesia & Analgesia. 2012

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