• **FACT SHEET No. 7**

Pain After Surgery in Children and Infants

Children have at least the same amount of pain from surgery as adults do, although it may not last as long because children usually heal more quickly. Children deserve protection, cannot advocate for themselves, and often may not complain of pain, so they need special consideration and pain assessment. All health professionals should know how to recognize, assess, and treat pain in children. [Finley 2005]

Untreated acute pain can result in chronic pain in children and adolescents [Batoz 2016], and failure to prevent pain in newborns can cause lifelong adverse effects, such as increased pain sensitivity. [Vinall 2014]

Surgical pain should be prevented whenever possible. Avoid unnecessary procedures and plan the management before the surgery. Assess pain using age-appropriate validated tools. Develop standard protocols that can be adapted to individual patients, so that when surgery is required, a combination of medications are available to provide the best possible analgesia with the lowest risk and side-effects, along with non-pharmacological pain control techniques. [AAP 2001] [APAGBI 2012]

Local/Regional Techniques

Local anesthetics can block pain nerves before, during, and after the surgical procedure.

- Local anesthetic infiltration at surgical site
- Local nerve block
- Plexus or nerve sheath block
- Neuraxial block (epidural, spinal)

Medications

Most medications are safe in children and infants, if the dosing is adjusted for weight and for the metabolic differences in newborns and infants. All of the following drugs may be used with appropriate

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monitoring to treat pain and to reduce nerve sensitization, depending on the patient and type of surgery or injury.

- Paracetamol/Acetaminophen
- Non-steroidal anti-inflammatory drugs
- Opioids
- Gabapentin
- Ketamine

Psychological and Physical Approaches

Psychological and physical techniques are very important, and are also inexpensive and safe. They should be available for all patients.

- Preparation and explanation
- Distraction, imaging, and relaxation (including deep breathing) [Davidson 2016]
- Positioning and early gentle movement

Parents' Role

- Advocating for their child's care
- Providing distraction, support, and comfort

Professionals' Role

- Be aware of the child's pain.
- Think of pain prevention before it happens. Do not do unnecessary procedures
- Recognize, assess, prevent, treat

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As part of the Global Year Against Pain After Surgery, IASP offers a series of Fact Sheets that cover specific topics related to postsurgical pain. These documents have been translated into multiple languages and are available for free download. Visit www.iasp-pain.org/globalyear for more information.

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