



Indications for anesthetics in the postoperative period of surgery in children

Indicações de anestésicos no pós-operatório de cirurgias em crianças

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ABSTRACT

Introduction: Proper management of postoperative pain in children is of utmost importance to ensure patients' comfort and adequate recovery. Anesthetics play a key role in this context, providing effective analgesia and minimizing adverse effects associated with pain. **Objectives:** To analyze the indications of anesthetics in the postoperative period of surgeries in children, examining the available options, their mechanisms of action, the available scientific evidence and the clinical benefits. **Theoretical Framework:** The topics covered include the different types of anesthetics used in 4 axes: opioids, local anesthetics, non-steroidal anti-inflammatory drugs (NSAIDs) and adjuvant anesthetics. In addition, it deals with the specific indications for the use of each type of anesthetic, the appropriate doses and the possible side effects. **Methodology:** The literature search was conducted using the electronic databases PubMed, Scopus and Web of Science. The following English descriptors were used: "postoperative pain management", "children", "analgesics". The inclusion criteria adopted comprised original articles available in full text and written in English. **Final Results:** Opioids, such as morphine and fentanyl, are frequently used to control severe pain, but should be administered with caution due to possible side effects, such as respiratory depression and excessive sedation. Local anesthetics, such as bupivacaine and lidocaine, are widely used for regional blocks and local analgesia, reducing the need for systemic opioids. NSAIDs, such as ibuprofen and paracetamol, are effective and safe options for mild to moderate pain management with few side effects. Study results indicate that the choice of anesthetic in postoperative surgery in children should be based on individual patient characteristics, type of surgery, pain intensity, and safety profile of the drug.

Keywords: Postoperative pain management, Children, Analgesics.