



Surgical complications in pediatric patients

Complicações cirúrgicas em pacientes pediátricos

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ABSTRACT

Introduction: Surgeries in pediatric patients represent a challenge for health professionals due to the complexity of the developing organism and the peculiarities of the pediatric population. Surgical complications can have a significant impact on the morbidity and mortality of these patients. **Objective:** To examine surgical complications in pediatric patients, identifying the main risk factors, the most common complications, and prevention and management strategies. **Theoretical Framework:** The topics covered comprise the different surgical areas in 4 axes: such as general surgery, orthopedics, cardiology, and the specific complications associated with each of them. Risk factors such as age, comorbidities, type of surgery and surgical technique used will be explored. **Methodology:** The literature search was conducted using the electronic databases PubMed, Scopus and Web of Science. The following English descriptors were used: "surgical complications", "pediatric patients", "risk factors". Inclusion criteria were original articles available in full text and written in English. **Final Results:** The results of this narrative review highlight the importance of early identification of risk factors and implementation of preventive measures to reduce surgical complications in pediatric patients. Among the main risk factors are neonatal age, the presence of comorbidities, the complexity of the surgery and the type of procedure performed. The most common surgical complications in pediatric patients include surgical wound infections, respiratory complications such as atelectasis and pneumonia, cardiovascular complications such as arrhythmias and heart failure, and complications related to medical devices such as obstruction of catheters or prostheses. The prevention and proper management of surgical complications involves a multidisciplinary approach, with the participation of surgeons, anesthesiologists, nurses and support staff. Measures such as antibiotic prophylaxis,



proper surgical technique, continuous monitoring during and after surgery, intensive postoperative care are essential to minimize the risk of complications.

Keywords: Complications, Risks, Regional anesthesia.