

Postoperative Outcome in Non-Preterm Infants Under One Year Old in Non-Cardiac Surgery

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Background: An observational study conducted earlier to determine predictors of postoperative outcome in non-cardiac surgical pediatric patients showed that factors which influenced postoperative evolution were multiple(1). These included American Society of Anesthesiologists (ASA) status, transfusion, age, emergency surgery, and surgery.

Objectives: To describe outcomes in non-preterm children under one year old included in the initial study (1).

Methods: Secondary analysis of the initial retrospective observational study in 594 patients. The Ethics Committee approved the study under the registration number 2017-CK-5-R1 on the 21 March 2017.

Results: There were 97 non-preterm infants included with a mean age of 4.4423.49 months. Mean weight was 5.1322.74 kilograms.

There were 48 abdominal surgical patients (49.49%), 48 neurosurgical patients (49.49%) and 1 orthopedic surgery patient (1.03%). 30 patients had intra-operative and or postoperative complications (organ failure or sepsis) (30.93%). The most common intra-operative complication was hemorrhagic shock (5.16%); the most affected system in the postoperative period was the respiratory system in terms of organ failure and pulmonary sepsis with an overall rate of 12.38%; the most common postoperative renal failure was 1.03%. There were 5 in-hospital deaths (5.16%) and all were ASA III, IV and V patients managed on an emergency basis.

Conclusion: In this cohort of 97 non-preterm infants under one year old, the rate of patients with intra-operative and or postoperative complications was 30.93%. Patients with fatal outcome had an ASA score III or more and were managed on an emergency basis.

Keywords: children under one year old, outcome, non-cardiac surgery

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