

Authors: Cristine D. Dahirou, Alain Chichom-Mefire, Marcelin Ngowe-Ngowe, Patrick H. Weledji

Outcome of paediatric abdominal surgical emergencies in the tropics: what is the current situation?

Background: Though they are mainly caused by self-limiting disorders, about 2.4-3.1% of paediatric abdominal emergencies are due to life-threatening surgical causes. Little is known in Cameroon and other countries with limited technical background about these emergencies and their impact on the paediatric population.

Objective: This study aimed at evaluating the clinical characteristics and the factors affecting outcome of paediatric surgical abdominal emergencies in a secondary healthcare centre in Douala, Cameroon.

Patients and Methods: An observational retrospective study involving paediatric patients aged 0 to 16 years was conducted in the Surgical Department of a level 1 Hospital in Douala, Cameroon. Patients' records and operation log books were checked for demographic data, clinical presentation, operative findings, post-operative complications and final outcome.

Results: Two hundred and fifty children, male-to-female ratio 1.6:1 and median age at presentation of 6.02 (range 1day to 16years). The median duration of symptoms before presentation to hospital was 94 hours. Intestinal obstruction was the commonest indication for pediatric emergency surgery, accounting for 115 (46%) patients. The various abdominal traumas constituted the second most common indication for emergency surgery with 51 (20.4%) patients. Appendicitis was responsible for 39 (15.6%) of all acute abdominal emergencies and was the most common aetiology in children older than 1 year. Others included typhoid perforations, ruptured ectopic pregnancy and primary peritonitis. Two hundred and two (81%) had postoperative complications. The commonest complications were paralytic ileus 30 (14.8%), wound infection 28 (13.9%) and chest infection 28 (13.9%). There overall mortality rate was 12.4% and it was highest in neonates (42%). Factors related to mortality included age, delay before surgery and the occurrence of post-operative complications.

Discussion: Paediatric surgical abdominal emergencies constitute a large percentage of the paediatric surgical workload in our settings. Intestinal obstruction is the commonest pediatric surgical emergency seen in Laquintinie hospital. Neonatal age, admission to surgery intervention time >72 hours, and severe postoperative complications are associated with high mortality.