

CLINICAL PROFILE OF EMERGENCY ABDOMINAL PATHOLOGIES REQUIRING INTESTINAL RESECTION IN CHILDREN

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Aim of the Study. To characterize the demographic, clinical, and nosological characteristics of children with urgent abdominal pathology who underwent intestinal resection.

Materials and Methods. A single-center retrospective cohort study was conducted to analyze the treatment outcomes of 195 children aged 0–18 years between 2014 and 2025. The overall clinical dataset included 230 hospitalizations. The inclusion criteria were urgent abdominal pathology, intestinal resection, and completion of the initial operation with either primary anastomosis or intestinal stoma formation. Elective procedures, operations without intestinal resection, and cases with insufficient primary medical documentation were excluded. Age, sex, route of hospital admission, severity of the patient's condition, underlying diagnosis, and clinical, laboratory, and

instrumental findings were analyzed. Quantitative data were presented as $M \pm m$ or as the median and interquartile range, while categorical variables were expressed as absolute numbers and percentages. The diagnostic assessment included clinical examination, complete blood count, biochemical blood tests, coagulation profile, plain abdominal radiography, and abdominal ultrasonography. Intraoperative assessment included evaluation of serosal color, intestinal peristalsis, pulsation of marginal vessels, and tissue bleeding. A unique identifier was maintained for each child with repeated hospitalizations, and the method used to complete the initial operation was considered the primary grouping variable.

Results. The mean age was 6.03 ± 0.42 years, with a median of 4.1 years and an interquartile range of 0.9–9.95 years. Boys predominated in the study population, accounting for 127 patients (65.1%), while girls accounted for 68 patients (34.9%). The age distribution was characterized by two relative peaks. The group of children younger than one year included 58 patients, among whom congenital malformations and necrotizing enterocolitis predominated. The second peak occurred in the 7–14-year age group and included 47 patients, predominantly with acute appendicitis and its complications. A total of 75.4% of children were admitted directly, while 7.7% were transferred from other healthcare institutions. At admission, 104 patients (53.3%) were in moderately severe condition, 61 (31.3%) were in severe condition, 24 (12.3%) were in satisfactory condition, and 6 (3.1%) were in extremely severe condition. Thus, 34.4% of the study population presented with severe or extremely severe conditions.

Based on the method used to complete the initial operation, two groups of comparable size were formed. Primary intestinal stoma formation was performed in 94 patients (48.2%), while primary anastomosis was performed in 101 patients (51.8%). The nosological structure included congenital gastrointestinal malformations, intestinal intussusception, intestinal obstruction of various etiologies, necrotizing enterocolitis, and complicated inflammatory and destructive diseases. The heterogeneity of

diagnoses reflected the actual spectrum of emergency pediatric abdominal surgery and required a stratified assessment of outcomes.

The overall dataset comprised 230 hospitalizations involving 195 patients, as staged treatment following stoma formation included subsequent restoration of intestinal continuity. Among the 94 patients with intestinal stomas, the interval before stoma closure was most frequently 3–4 months (29.8%), followed by 4–6 months (24.5%) and 2–3 months (21.3%). This distribution reflected the need to achieve clinical stability and restore nutritional status before repeat surgery. Plain abdominal radiography was used to identify air-fluid levels, pneumatosis, and signs of intestinal obstruction, while ultrasonography was performed to assess free abdominal fluid, inflammatory infiltrates, and the condition of the intestinal wall.

Conclusion. The cohort was characterized by a predominance of boys, a substantial proportion of young children, and a high frequency of severe conditions at admission. The nearly equal distribution between primary stoma formation and primary anastomosis allowed a comparative analysis of surgical strategies. Nosological heterogeneity limits the generalizability of the findings to individual diseases but enables the assessment of factors common to urgent inflammatory and destructive intestinal lesions. The obtained characteristics may be used to plan the scope of specialized medical care and establish stratified research groups. In subsequent analyses, the characteristics of the initial hospitalization should be distinguished from events associated with staged surgical treatment.