

SPONTANEOUS GASTROINTESTINAL PERFORATION IN PEDIATRIC PATIENTS : CLINICAL FEATURES ACCORDING TO AGE

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Aim of the Study: Spontaneous gastrointestinal perforations (SGIPs; not associated with injury or disease) occur rarely in pediatric patients. We aimed to define age-specific features associated with SGIPs in pediatric patients.

Methods: We retrospectively reviewed the clinical data of children (before adolescence) who received surgery due to a gastrointestinal perforation at a single institution. Forty-one patients with SGIPs were enrolled. Characteristics were compared between two age groups: neonates (Group A) and beyond neonates (Group B).

Results: Group A included 26 patients (63.4 %) and Group B included 15 patients (36.4 %). Fourteen perforations occurred in the stomach or duodenum (34.2 %), eleven in the small intestine (26.8 %), and sixteen in the large intestine (39.0 %). A significantly higher proportion of perforations occurred in the stomach and small intestine in Group A than in Group B, while more perforations occurred in the large intestine in Group B than in Group A ($p=0.006$). Several associated conditions during the preoperative period were identified in both groups. The overall mortality rate was 14.6 % (6/41). Mortality was relatively high in group A (5/26, 19.2 %) and for perforations of stomach (3/14, 21.4 %) and small intestine (3/11, 27.3 %); however, there were no significant differences with regard to age or perforation site ($p=0.065$; 0.388, respectively).

Conclusions: SGIPs in pediatric patients had diverse clinical features and different perforation patterns according to age group. However, no significant group differences in mortality were found. Thus, favorable results regardless of age can be expected with prompt recognition, medical resuscitation, and adequate surgical management.