

Documents

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Burden and mortality of congenital gastrointestinal anomalies: insights from a nationwide cohort study (2024) *Pediatric Surgery International*, 40 (1), art. no. 270, .

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Abstract

Purpose: Improved perioperative care has enhanced survival in children with congenital gastrointestinal conditions and abdominal wall defects (AWD). However, epidemiological and surgical outcomes in developing nations are still scarce. Our aim was to assess the burden and mortality of common congenital gastrointestinal anomalies and AWD in Malaysia, and their influencing factors. **Methods:** Using the Global PaedSurg study protocol with permission, we performed a prospective cohort study on children presenting for the first time between October 2021 and April 2022 with these conditions: Esophageal atresia (EA), congenital diaphragmatic hernia (CDH), intestinal atresia, gastroschisis, exomphalos, anorectal malformation (ARM) and Hirschsprung's disease. We compared mortality and 30-day outcome data across different geographical regions in Malaysia. **Results:** There were 228 patients with 242 study conditions (EA n = 28, CDH n = 36, intestinal atresia n = 49, gastroschisis n = 12, exomphalos n = 8, ARM n = 77, Hirschsprung's disease n = 32). Our mortality rate was 8.8%; 60% of these were CDH patients. Factors significantly associated with mortality were CDH diagnosis, central venous access requirement, higher American Society of Anesthesiologists (ASA) score, blood transfusion and ventilation requirement. **Conclusion:** Diagnosis of CDH is the most important predictor for sepsis on arrival and mortality, therefore measures should be taken for early recognition and aggressive management. © The Author(s), under exclusive licence to Springer-Verlag GmbH Germany, part of Springer Nature 2024.

Author Keywords

Abdominal wall defects; Congenital gastrointestinal anomalies; Global child health; Global pediatric surgery; Mortality; Outcomes

Index Keywords

cohort analysis, cost of illness, digestive system malformation, epidemiology, female, human, infant, Malaysia, male, mortality, newborn, prospective study; Cohort Studies, Cost of Illness, Digestive System Abnormalities, Female, Humans, Infant, Infant, Newborn, Malaysia, Male, Prospective Studies

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