

ABSTRACT

MYPaedSurg: BURDEN AND SHORT-TERM OUTCOME OF CONGENITAL GASTROINTESTINAL SURGICAL CONDITIONS IN MALAYSIA

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Abstract

Many congenital anomalies involving gastrointestinal tract which were once considered fatal are now surgically correctable due to advances in perioperative care. However, scarce data are available on outcomes of paediatric surgical care in our setting.

Aim: To analyse the burden and short-term outcome of key indicator congenital gastrointestinal anomalies across different regions in Malaysia.

Methods: Using the reference study protocol by the Global PaedSurg study group, we conducted a multicentre, 30-day prospective cohort study for children presenting for the first time with any of these conditions i.e. oesophageal atresia (OA), congenital diaphragmatic hernia (CDH), intestinal atresia, gastroschisis, exomphalos, anorectal malformation (ARM) and Hirschsprung's disease during a consecutive six-months period between October 2021 until April 2022. All 14 public hospitals in Malaysia with specialist paediatric surgery services as of October 2021 were involved and analysed according to regions: the Northern, Central, East Coast and South of Peninsular Malaysia and East Malaysia.

Results: 228 patients with 242 study conditions were included in the final analysis. Data were obtained from 14 paediatric surgery centres from 11 states with variable level of experience of the paediatric surgeons. 31.5% of patients contributed by the central region of Malaysia. Antenatal diagnosis were made in 20.6% of patients. 16.2% of patients presented with sepsis while 11.4% and 7.0% presented with hypovolemia and hypothermia respectively. Interventions were carried out in 91.7% of patients. We reported an overall mortality rate of 8.3% with the largest proportion contributed by patients with CDH. Respiratory failure is the leading cause of death with overall rate of 42.9% from all mortalities. Interestingly, no mortality was reported from the East Malaysia i.e. Sabah and Sarawak.

Conclusion: Our result showed that overall mortality rate in Malaysia is lower than reported by the Global PaedSurg group for middle income countries at 20.4% while morbidity rate varies.