



2020 VIRTUAL 12th CONFERENCE 23-5 DECEMBER

BOOK OF ABSTRACTS

ISSN 2297-931X

Cogent Medicine (2020), 7:1848781

other tertiary, better-resourced hospitals in other parts in South Africa. The main predictor for survival was higher gestational age and higher birth weight. Need for ventilator support and sepsis increased mortality risk significantly. Babies born to a mother with gestational hypertension had a 2-fold increased chance of survival.

Conclusion: This is the first study looking at survival of very low birth weight babies in the under-privileged part of the Eastern Cape of South Africa. Compared to better-resourced public hospitals in the country the survival rate, especially for infants born with extremely low birth weight, remains unacceptably low. More needs to be done to prevent preterm and low birth weight births, but also the facilities caring for these most vulnerable persons must be equipped and staffed accordingly.

ID: 203/OP14: 2

Type 1—Oral Presentation: Clinical audit, Prospective survey, Clinical Study

Topics: GASTROENTEROLOGY, NEONATOLOGY, PUBLIC HEALTH

Keywords: neonatology, congenital anomalies, paediatric surgery, gastrointestinal tract

Management and outcomes of gastrointestinal congenital anomalies in low-, middle-, and high-income countries: A multi-centre, international, prospective cohort study

Yalcinkaya, Ali¹; Sonmez, Kaan²; Karabulut, Ramazan²; Turkyilmaz, Zafer²; Seref, Kivanc²; Altin, Merve²; Aykut, Merve¹; Akan, Mehmet Eren¹; Erdem, Melisa¹; Ergenekon, Ebru³; Turkyilmaz, Canan³; Keles, Elif³; Canoz, Ali¹; Yeniay, Asli Ozturk¹; Eren, Elif¹; Aydin, Emrah⁴; Ademuyiwa, Adesoji O⁵; Ameh, Emmanuel⁶; Davies, Justine⁷; Lakshoo, Kokila⁸; Poenaru, Dan⁹; Ade-Ajayi, Niyi¹⁰; Sevdalis, Nick¹¹; Leather, Andrew¹²; Wright, Naomi¹²; .. Global PaedSurg Research Collaboration¹³

¹Gazi University School of Medicine, Ankara, Turkey.; ²Paediatric Surgery Department, Gazi University School of Medicine, Ankara, Turkey.; ³Department of Paediatric Neonatology, Gazi University School of Medicine, Ankara, Turkey.; ⁴Paediatric Surgery Department, Koç University School of Medicine, Istanbul, Turkey.; ⁵Paediatric Surgery Unit, College of Medicine, University of Lagos and Lagos University Teaching Hospital, Lagos, Nigeria.; ⁶Paediatric Surgery Department, National Hospital, Abuja, Nigeria.; ⁷Institute of Applied Health Research, University of Birmingham, Birmingham, UK.; ⁸University of Oxford, Oxford, UK.; ⁹McGill University, Montreal, Canada.; ¹⁰Paediatric Surgery Department, King's College Hospital, London, UK.; ¹¹Centre for Implementation Science, King's College London, UK.; ¹²King's Centre for Global Health and Health Partnerships, School for Population Health and Environmental Science, King's College London, UK.; ¹³Participating institutions from across the globe.

Background: Congenital anomalies (CAs) are the 5th leading cause of death in children under 5 years globally. Without emergency surgical care, many gastrointestinal CAs are incompatible with life. We compared, for the first time, management and outcomes of a selection of common gastrointestinal CAs in low-, middle- and high-income countries (LICs, MICs and HICs) globally.

Methods: Children's surgical care providers across the globe were invited to participate in the study and collect clinical data prospectively on consecutive patients presenting primarily with seven CAs (Table 1 203) over a minimum of one month between October 2018–April 2019. The primary outcome was all-cause in-hospital mortality. Univariate analysis was used to identify factors associated with mortality ($p \leq 0.01$), which were then analysed using multivariate logistic regression, presented as (adjusted odds ratio, p-value). All participating centres had study approval.

Results: 1445 collaborators from 272 hospitals (11 LICs, 171 MICs, 90 HICs) in 74 countries contributed data. 3841 patients with 3967 study conditions were included. The following were associated with mortality: country income status (0.35, $p < 0.001$, Table 1), induced vaginal versus spontaneous delivery (0.42, $p = 0.024$), weight at presentation (0.61, $p < 0.001$), unavailability of ventilation when required (3.74, $p = 0.009$), unavailability of parenteral nutrition when required

Table 1.

	N	Mortality [95% Confidence Interval]		
		LICs	MICs	HICs
Gastroschisis	451	90.0%[87.2-92.8]	32.1%[27.8-36.4]	1.4%[0.3-2.5]
Oesophageal atresia	560	85.7%[82.8-88.6]	29.4%[25.6-33.1]	7.1%[5.0-9.2]
Congenital diaphragmatic hernia	447	-	38.3%[33.7-42.8]	14.2%[11.0-17.4]
Intestinal atresia	678	60.0%[56.3-63.7]	21.3%[18.2-24.4]	3.3%[2.0-4.7]
Anorectal malformation	990	20.0%[17.5-22.5]	12.1%[10.0-14.1]	1.7%[0.9-2.5]
Hirschsprung's Disease	517	11.8%[9.0-14.5]	6.6%[4.5-8.8]	1.9%[0.7-3.0]
Exomphalos (omphalocele)	324	28.6%[23.7-33.5]	20.4%[16.0-24.8]	17.1%[13.0-21.2]

(2.95, $p = 0.001$), sepsis on arrival (1.99, $p < 0.001$), additional CA (1.63, $p = 0.001$), surgical site infection (1.62, $p = 0.034$), unavailability of a Surgical Safety Checklist (1.25, $p = 0.014$).

Conclusion: Significant disparities in mortality exist for common gastrointestinal CAs globally. Rapid action is required through a coalition of global stakeholders to eradicate these inequalities.

ID: 254/OP14: 3

Type 3—Oral Presentation: Case Report (description of case/s with useful learnings for clinicians)

Topics: EMERGENCY PEDIATRICS

Keywords: testicular torsion, cremasteric reflex, children

Testicular torsion in children with positive cremasteric reflex: a case report

Aswin, Amalia¹; Pratiwi, Ayu Nurliyana²; Indrawan, Muhammad Aris¹; Yudistira, Aditya Rahman Rosean¹; Soebhali, Boyke³

¹Faculty of Medicine, Mulawarman University, Samarinda, Indonesia; ²General Practitioner at Abdul Rivai Hospital, Berau, Indonesia; ³Department of Urology, Abdul Wahab Sjahranie Hospital/ Mulawarman University, Samarinda, Indonesia

Background: Testicular torsion is the most common cause of acute scrotal pain in children. It is considered an emergency, as a delay of diagnosis will cause irreversible testicular damage as the results of blockage in testicular blood flow. The cremasteric reflex has been reported to be absent in 100% of cases of testicular torsion. The absence of the reflex is indicative of testicular torsion, especially in the pediatric population.

Case Study: A 13-year-old boy was admitted to the emergency department with acute pain on the scrotum. The symptom started six hours prior to arrival, the pain was sharp and severely aching without radiation, and accompanied by nausea and vomiting. There was no history of trauma over the scrotum, inguinal region, or a history of urinary tract infection. His right side of the scrotum was in normal findings. His left side of the scrotum showed elevated left testis and pressure pain with no sign of inflammation. The phren test was negative, and the cremasteric reflex was positive. The examination of the penis showed no abnormal discharges through the urethra. The diagnosis of testicular torsion was given. After an emergency surgery under general anaesthesia with left orchidectomy and right orchidopexy was performed, his symptoms were much improved.

Learning Points Discussion: We hereby report on a case of testicular torsion in children with positive cremasteric reflex. Physical examination plays an important role in the diagnosis of testicular torsion. However, the cremasteric muscle and reflex are altered in certain disease states