

## **Gastroschisis Management: AIC Kijabe Hospital successes, failures and lessons learned**

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### Background

Gastroschisis survival rate is between 90% and 100% in high resourced settings. This is attributed to early diagnosis, advances in pediatric surgical and neonatal care, introduction of parenteral nutrition as well as an improvement in the management of neonatal sepsis. In Sub-Saharan Africa (SSA) the highest survival rates (70%) have been reported in South Africa. The worst reported outcomes in SSA are in Côte d'Ivoire and Uganda where mortality rates of nearly 100% have been documented.

### Methods

A retrospective audit of the pediatric surgical operative database identified 29 Gastroschisis cases presenting between January 2011 and December 2017. Demographic data for patient and mother and patient therapeutic and survival data were then collected from the patients' files.

Survival was defined as discharge to home.

### Results

During the review period, 29 patients (19male: 10female) presented with GS. The overall survival rate was 48%. 11 out of the 29 neonates were preterms. Average time of presentation was 42.2hours. The average length of hospital stay for all the neonates was 23.04 days. On average babies were able to tolerate full feeds 21.79 days since delivery. Of the 20 who received TPN, 8 required central lines, the rest received their nutrition through the peripheral lines. Seven of the 10 neonates who developed sepsis were attributable to central line associated blood stream infection.

### Conclusions

Multidisciplinary approach and prompt management are essential for survival. Contextual modifications have resulted in improvements in outcomes like selective insertion of central lines, avoidance of theatre and minimalistic approached. To further improve outcomes, fatalistic mindset has to be eliminated from the health care system, there has to be prompt referral of adequately resuscitated children.