

Prevalence, Predictors and Outcomes of Small for Gestational Age in Twins Gestations

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Background:

- Twin pregnancies have increased risk of neonatal complications
- Small for gestational age (SGA) infants have greater risks of various complications

Objective:

To determine the burden and outcome of twin pregnancies complicated by SGA

Design:

This was a two-year retrospective audit at the Korle Bu Teaching Hospital (KBTH), from January 2020 to December 2021.

Method:

- Retrospective audit of delivery records conducted at Korle Bu Teaching Hospital in Ghana
- Data collected on twin deliveries including maternal age, parity, gestational age, birthweight, Apgar scores, and sex
- INTERGROWTH 21 Newborn Size Calculator used to determine birthweight centiles

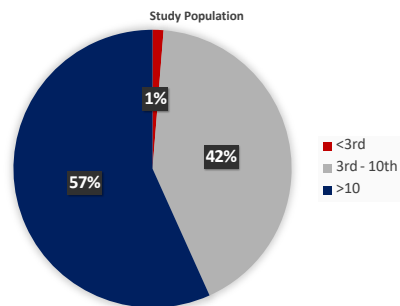


Fig 1: Birthweight Centile Distribution at deliveries

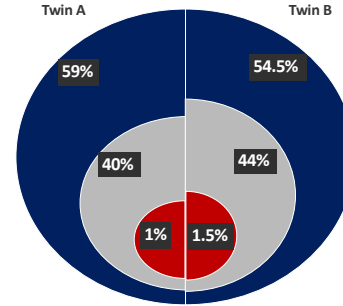
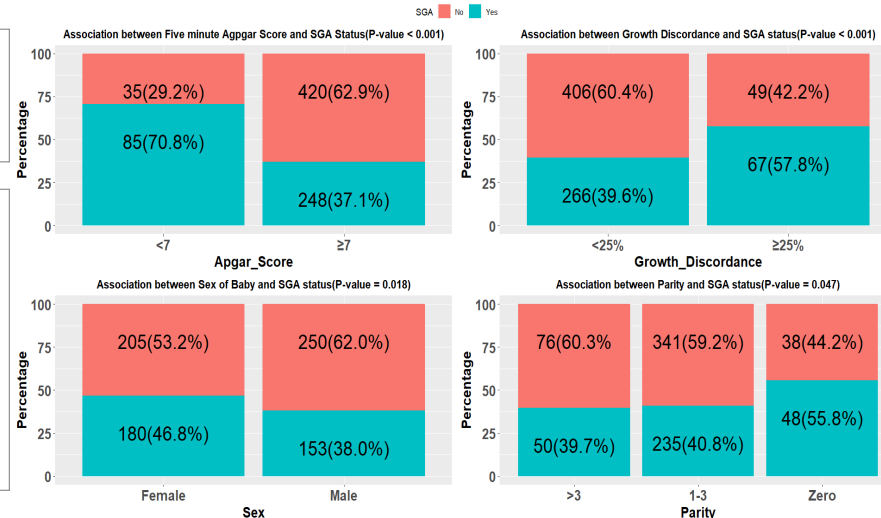


Fig 2: Birthweight Centile Distribution by birth order



Results

This study involved 394 pairs of twins born to mothers with a mean age of 30.5 ± 5.6 years, and the majority (73.1%) were multiparous. The average gestational age at delivery was 35.6 ± 3.2 weeks, with 38.6% near-term and 11.2% very preterm. Over half were delivered by caesarean section (59.6%).

The mean birth weight of twin deliveries at KBTH was 2.2 ± 0.6 kg.

The prevalence of low birthweight babies (<2.5kg) was 61.0%.

Prevalence of stillbirth among twin gestations was 5.7%

Key Findings:

- SGA prevalence: 42.3% (<10th centile), 1.3% (<3rd centile)
- Growth discordance (≥25%): 14.7% of twin pairs
- SGA more likely with nulliparity and female babies
- Had a > 5 times odd of low APGAR scores (aOR: 5.4, 95%CI: 3.1 – 9.6)
- SGA babies had a six times higher odds for stillbirth (aOR: 6.2, 95%CI: 2.6-14.9)

Conclusion:

The prevalence of SGA within our twin birth population was 42%, and was associated with significant adverse perinatal outcomes.

This highlights the need for closer surveillance and management to optimize the outcomes in twin gestation

References

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