EARLY COMPARED TO LATE ENTERAL FEEDING IN NEONATES WITH PERINATAL ASPHYXIA ADMITTED IN KENYATTA NATIONAL HOSPITAL

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BACKGROUND

- Current Kenya National guidelines on feeding the sick neonate recommend early enteral feeding from the second day of life because minimal enteral feeding in sick neonates improves feeding tolerance.
- Limited information is available on the effect of early compared to the delayed introduction of MEN on feeding intolerance or Necrotizing enterocolitis (NEC) outcomes in neonates with perinatal asphyxia.
- There is lack of clear guidance on when to initiate enteral feeds in term neonates with perinatal asphyxia.

OBJECTIVES

- **Primary objective**
  - To compare feeding intolerance rates in term neonates with moderate or severe perinatal asphyxia in those fed enterally early (within 48 hours) and those who fed enterally late (72-96 hours).
- **Secondary objective**
  - To compare duration to reach full feeds and average weight change in term infants with moderate or severe perinatal asphyxia in those fed enterally early (within 48 hours) and those fed enterally late (72-96 hours).

METHODS

- Open label randomized controlled trial
- Term neonates with moderate or severe perinatal asphyxia were randomly allocated into two groups: early feeding within 48 hours and late feeding within 72-96 hours.
- The groups were followed up within 14 days for feeding intolerance and weight gain.
- Data analysis was by intention to treat method using descriptive statistical and analytical methods.

RESULTS

- Out of 116 neonates: 41 (35.3%) had feeding intolerance; 39 (33.9%) had gastric aspirate, 3 (2.6%) vomited and 4 (3.4%) had feeds withheld for 1.75 days.
- Early feeding group: 16 (26.7%) had gastric aspirate, 2 (3.3%) vomited; 3 (5%) had feeds withheld.
- Late feeding group: 23 (41.1%) had gastric aspirate, 1 (1.8%) vomited and 1 (1.8%) had feeds withheld.
- No statistical significance in rates of feeding intolerance.
- The severity of asphyxia affected feeding tolerance (P value 0.016).
- Age at starting enteral feeds did not affect feeding tolerance (P value 0.266).
- The late feeding group had a higher proportion of participants who regained birth weight at 25 (44.60%), while the early feeding group had 19 (31.70%).

CONCLUSIONS

- There was no significant difference in the rates of feeding intolerance between the early and the late feeding group.
- Feeding intolerance was not very common in neonates with moderate or severe asphyxia and the common signs of feeding intolerance were vomiting and gastric aspirate, occurring in the first two days of life.
- Duration to full feeds and average weight change were not significantly different in the two groups.
- There was no statistically significant difference for outcomes like mortality, discharged or long duration of hospital stay of >14 days.
- It was also evident that the severe the perinatal asphyxia the more the rates of feeding intolerance while age at starting enteral feeds does not significantly affect feeding tolerance.

RECOMMENDATIONS

- Early enteral feeding using breastmilk is highly recommended in neonates with perinatal asphyxia especially in setups were parenteral nutrition is not readily available.

REFERENCES

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