

Study on Hypoglycemia in Newborns in Rims

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Abstract: Hypoglycemia in newborn is defined as blood sugar level less than 40mg/dl. It is very common problem in newborns especially pre-terms. The following study has been done to see the pattern of hypoglycaemia among newborns admitted in RIMS, Ranchi. Initially blood sugar has been determined using glucometer followed by laboratorial confirmation.

Keywords: Hypoglycemia, pre-terms, blood sugar, glucometer

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I. Introduction

Hypoglycemia is one of the most common metabolic problem in neonatal wards with incidence varying from 0.2 to 47% . It occurs in 8.1% of term LGA babies and in 14.7% SGA infants. Persistence of hypoglycemia may have far reaching consequences for the developing brain of the neonate

II. Objective

To evaluate the Clinico- epidemiological profile of patients with hypoglycemia in NICU and the study the influence of various factors on this metabolic emergency.

III. Material And Methods

Open prospective study in which a total of 450 neonates admitted in NICU, RIMS ,RANCHI were enrolled. They were subjected to glucose estimation at birth (within half hour) and then at 2 hours and 4 hours. Levels less than 40 mg/dl irrespective of the birth weight and gestational age were considered diagnostic of hypoglycemia. Babies with detectable hypoglycemia were monitored 4-6 hourly. One touch test strips were used. Hypoglycemia was managed as per standard protocol.

IV. Results

A total of 12 babies were detected to have hypoglycemia giving an overall incidence of 2.6%. Incidence in LBW babies was 4.05% and in LGA babies it was 8.4%, 7.5% babies had history of maternal toxemia and 5.6% were associated with maternal diabetes. 52.67% hypoglycemic neonates were SGA, 34.33% were AGA and remaining 12.82% were LGA. Illnesses associated with hypoglycemia neonates were birth asphyxia (12.2%), neonatal septicemia (37.6%), ICH (3.42%) and respiratory distress in 23.6%. In our study 15.54% hypoglycemic neonates were asymptomatic and it constituted 0.41% of total NICU admissions. Symptomatic hypoglycemia constituted 2.25% of total NICU admissions. Commonest sign noted in these babies was refusal to feed (49.63%) followed by cyanosis in 23.4% and lethargy in 18.4% cases. 24.5% of hypoglycemic neonates were detected within 12 hours of birth and 44.4% within 24 hours of age. 93.6% cases were given IV glucose and 8.5% cases needed hydrocortisone.

V. Conclusion

Hypoglycemia is a common problem and needs a mandatory routine cot side screening. Clinical signs are non specific. Early feeding helps prevent hypoglycemia and one touch test strip method is good and effective food for screening babies.

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