

Research

Title

Assessing Iron Deficiency anemia in paediatric congenital heart disease at a tertiary hospital in Eastern Uganda.

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Abstract

Iron deficiency is among the most common nutritional deficiencies and among children with congenital heart disease, the associated anemia is a significant contributor to morbidity and mortality especially in low middle income countries where definitive surgery usually is inaccessible and significantly delayed. The objective of this study was to determine the prevalence and factors associated with iron deficiency anemia among children with congenital heart disease at the paediatric cardiology clinic of a tertiary hospital in Eastern Uganda.

Body:

Methods: This was a cross sectional study. A total of 140 children 6 months to 12 years with congenital heart disease were recruited into the study. Iron deficiency anemia was defined as Ferritin <15 micrograms/L and Hemoglobin as recommended by the world health organization; for children 6 months to <5 years HB<11 g/dl, for children 5 to <12 years, HB <11.5 g/dL and HB<12g/dl for children 12 to <15 years. Logistic regression used to determine factors associated with iron deficiency anemia.

Results: Majority (75.7%) of the participants had acyanotic heart lesions. The prevalence of iron deficiency anemia was 20.7% with a 95% CI of 14.7-28.3%. The prevalence of iron deficiency anemia was 26.5% and 18.9% among participants with cyanotic and acyanotic heart lesions respectively. Lack of iron supplementation (OR: 0.14, 95%CI: 0.03-0.68, P: 0.014) and Malnutrition (OR: 5.03, 95%CI: 1.68-14.89, P: 0.004) were associated with iron deficiency anemia.

Conclusion: Children with congenital heart disease in low resource settings should be routinely screened for iron deficiency anemia and supplemented with iron when deficient.



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