Role of Oral Zinc Supplementation in Reduction of Neonatal Morbidity and Mortality in Zagazig University Hospitals

Abstract

Background: Zinc is an essential cofactor for several hundred enzymes with a multitude of functions. Zinc is vitally important for proper immune functions, because of its role in skin and mucosal barrier function as well as humoral and cellular immunity. Zinc deficiency limits growth and development in infancy and childhood. Severe zinc deficiency may be observed in preterm infants especially if necrotizing enterocolitis coexisted. This study aimed to evaluate the ability of extra zinc doses to improve immunity, decrease disease incidence and death rate and show its effect on development and growth of preterm and term neonates. Methods: The present study was performed in the period from February 2016 to February 2017 in pediatrics department of Zagazig University Hospitals. 90 patients (45 patient in group I zinc supplementation, 45 patiant in group II without zinc) were enrolled in single blind randomized case control study Results: This study revealed that there was a considerable decrease in morbidity and death rates in correlation with the use of extra doses of zinc (10 mg/day for 14 day). Conclusions: Zinc supplementation can decrease the rate of morbidity and mortality, Zinc is vitally essential for proper immunity