Abstract

Introduction: Newborns exclusively breast-fed (EBF) may present low levels of glycemia in the first hours of life and their monitoring is very important. Severe hypoglycemia is associated with neurological sequelae. Objectives: To determine the influence of breastfeeding exclusive or not over glycemia levels in the newborn during the first 24 hours of life. Design: Cusieexperimental kind of study. Setting: Immediate care and child care services, Instituto Nacional Materno Perinatal, Lima, Peru, a teaching hospital. Participants: Breast-fed newborns. Interventions: Ninety newborns were distributed in 3 groups according to the kind of feeding: a) 30 EBF; b) 30 breastfeeding plus maternized milk; and, c) 30 breastfeeding plus glucose solution. Newborns admitted fulfilled criteria of inclusion and previous consent of the mother, as a sample of blood was taken from the mother and the newborn to determine glycemia at birth and at 2, 4, 6, 12, 18, and 24 hours. Main outcome measures: Newborn glycemia levels. Results: Newborns EBF have a tendency to a more prolonged decrease in glycemia levels and a farther increase, than those breastfed plus maternized milk and breast milk plus glucose solution; these differences were significant with a p < 0.0001 and p = 0.006 respectively. Conclusions: The levels of glycemia < 40 mg/dL (hypoglycemia) was higher in those EBF (16.7%), followed by those breast-fed plus maternized milk (10%) and none in those breast-fed plus glucose solution. Weight lose was greater in those newborns with EBF.

Keywords
Infant, newborn; breast feeding; gestational age; hypoglycemia.