Abstract

Objective: To identify the risk factors for bloodstream infection associated with peripherally inserted central catheters in neonates. Methods: A prospective cohort study conducted in the neonatal intensive care unit with newborns undergoing insertion of 401 peripherally inserted central catheters. Clinical characteristics of the newborn, catheter insertion technique, intravenous therapy and catheter dwell time were tested as risk factors for removal due to catheter associated bloodstream infection, using bivariate analysis and multivariate analysis with Poisson regression. Results: The data suggest that the lowest mean in weight and corrected gestational age, as well as the largest catheter dwell time were associated with the occurrence of bloodstream infection associated with the catheters. The corrected gestational age, clinical diagnosis of transitional metabolic disorder or apnea, and the use of two-lumen catheters have been identified as risk factors. Conclusion: The lowest correct gestational age of the newborn, the clinical diagnosis of metabolic disorder or apnea, and the use of two-lumen catheters were identified as risk factors for bloodstream infection associated with peripherally inserted central catheters in neonates.

Keywords

Neonatal nursing, Infant, newborn, Catheterization, central venous; Risk factors