



Nonelective removal of peripherally inserted central catheters (PICCs) due to complications continues to be a major concern in neonatal intensive care units (NICUs) around the world” Costa et al (2015).

Reference:

Costa, P., Kimura, A.F., Brandon, D.H. and Damiani, L.P. (2015) Predictors of Nonelective Removal of Peripherally Inserted Central Catheters in Infants. *Biological Research for Nursing*. July 1st. .

ReTweet if useful... Predictors of nonelective removal of PICC lines in infants
<http://ctt.ec/L36Ut+> @ivteam #ivteam

Click To Tweet

Abstract:

BACKGROUND: Nonelective removal of peripherally inserted central catheters (PICCs) due to complications continues to be a major concern in neonatal intensive care units (NICUs) around the world. Nonelective removal results in interruption of intravenous therapy, added costs, stress, and negative impacts on infant’s health. Identification of predictors of complications that lead to nonelective removal of PICCs would allow for the initiation of preventive strategies to improve the quality of care.

AIM: To identify predictors of nonelective removal of PICCs in neonates.

METHODS: A prospective cohort study with a sample of 524 PICC lines inserted in 436 neonates admitted to a tertiary-level NICU of a Brazilian hospital. Data were collected on all neonates between August 31, 2010, and August 30, 2012. Neonates were monitored daily from insertion of the catheter until its removal. Bivariate analysis and a logistic regression were conducted in order to identify predictors of nonelective removal.

RESULTS: A diagnosis of a transitory metabolic disorder (hypoglycemia; disorders of calcium, magnesium, sodium, or potassium; or dehydration), previous PICC line insertion, insertion of dual-lumen polyurethane PICC, noncentral tip position, and multiple intravenous solutions in a single-lumen silicone PICC were predictors of nonelective removal of PICC lines.

CONCLUSION: The avoidance of repeated PICC insertions, noncentral tip position, and placement of single-lumen silicone PICCs for administration of four or more intravenous solutions is suggested. Interventions should be explored that facilitate PICC insertion success and correct tip placement.

Thank you to our partners for supporting IVTEAM

