



#IVTEAM #Intravenous literature: Newberry, D.M., Young, T.E., Robertson, T., Levy, J. and Brandon, D. (2014) Evaluation of neonatal peripherally inserted central catheter tip movement in a consistent upper extremity position. *Advances in Neonatal Care*. 14(1), p.61-8.

Abstract:

**OBJECTIVE:** To compare the effect of standardized upper extremity position versus varied upper extremity positions on neonatal peripherally inserted central catheter (PICC) tip placement and movement. Secondary outcomes assessed were compliance with education, implementation, and complication rates.

**STUDY DESIGN:** Tip movement was analyzed between 136 post-PICC insertion x-ray pairs from 72 infants in the 6 months before and after standardization of upper extremity position. Tip movement was regressed over days between x-ray pairs, respiratory support, absolute weight change, and insertion vein.

**RESULTS:** There was no difference in PICC tip movement among varied analysis pairs or when standard position pairs were compared with pairs that were in a same nonstandard position. Days between x-rays, respiratory support, absolute weight change, and insertion vein did not predict tip movement. Attendance at education sessions was 100%. Compliance with the new standard was 73%. Complication rates were not significantly different.

CONCLUSION: Standardization of upper extremity position during neonatal PICC confirmation x-rays did not alter PICC tip movement.

Other intravenous and vascular access resources that may be of interest (External links - IVTEAM has no responsibility for content).

Guide for intravenous chemotherapy and associated vascular access devices from Macmillan. An example of peripheral cannulation OSCE from OSCE Skills.

