

**In an effort to minimize painful procedures, pediatric nursing staff conducted a prospective, observational study to determine if blood sampling using existing PIVs resulted in the loss of the access. The ability to obtain the sample from the PIV was measured along with patient and PIV characteristics” O’Neil et al (2018).**

Abstract:

Purpose: Although pediatric patients report venipuncture as their most feared experience during hospitalization, blood sampling from peripheral intravenous accesses (PIVs) is not standard of care. Blood sampling from PIVs has long been considered by healthcare personnel to harm the access. In an effort to minimize painful procedures, pediatric nursing staff conducted a prospective, observational study to determine if blood sampling using existing PIVs resulted in the loss of the access. The ability to obtain the sample from the PIV was measured along with patient and PIV characteristics.

Design and Methods: Specimen collection using 100 existing PIVs was attempted on pediatric inpatients. Each PIV was observed for functionality, infiltration, occlusion, and dislodgement following collection and again in 4 h. Frequencies of PIV loss and successful blood sampling were calculated. Patient age, PIV gauge, access site, and PIV age were evaluated for associations with successful sampling using chi-square tests, Fisher’s exact tests, and logistic regression.

Results: PIV survivability was reported at 99%. The ability to obtain a complete specimen was reported at 76% and found to be significantly related to PIV age and site. Size of PIV and patient’s age were not significantly related to successful sampling.

Conclusions: Encouraging rates of PIV survivability and collectability suggest blood sampling from PIVs to be a valuable technique to minimize painful and distressful procedures.

Practice Implications: Nursing practice was changed in this pediatric department. Patients and families are saved the pain and distress of venipuncture. Nurses reported saving time

and personal distress by avoiding the venipuncture procedure.

Reference:

O'Neil, S.W., Friesen, M.A., Stanger, D. and Trickey, A.W. (2018) Survivability of Existing Peripheral Intravenous Access Following Blood Sampling in a Pediatric Population. *Journal of Pediatric Nursing*. March 7th. .

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