
Abstract:

To prevent complications from peripheral vascular access device (PVAD) therapy, the Infusion Nurses Society (INS) developed 2 scales to measure the extent and severity of phlebitis and infiltration in PVADs. This study evaluated the psychometric properties of these scales to validate them with respect to their interrater reliability, concurrent validity, feasibility, and acceptability. A total of 182 patients at 2 sites were enrolled, and 416 observations of PVAD sites were made. Two nurses independently rated each PVAD site for the presence or absence of phlebitis and/or infiltration by using the INS scales. The interrater reliability was calculated, as was the agreement of the observed versus charted incidence of phlebitis and infiltration (concurrent validity) and the ease of use of the scales (feasibility, acceptability). Interrater reliability for both the Phlebitis and Infiltration scales and concurrent validity were found to be statistically significant (P < .05). The study nurses reported the scales to be easy to use, taking an average of 1.3 minutes to complete both. The importance of valid measures for use in research cannot be underestimated. The INS Phlebitis and Infiltration scales have been shown to be easy to use, valid, and reliable scales.