



Intravenous literature: Fearonce, G., Faraklas, I., Saffle, J.R. and Cochran, A. (2010) Peripherally inserted central venous catheters and central venous catheters in burn patients: a comparative review. *Journal of Burn Care & Research*. 31(1), p.31-5.

Abstract:

Central venous catheters (CVCs) are traditionally used for central venous access in the intensive care unit setting. Use of peripherally inserted central catheters (PICCs) now often extends into the intensive care unit. The goal of this review is to compare the use and safety of PICCs vs CVCs in burn patients. This institutional review board-approved cohort review included all burn patients at a single center who received one or more PICCs during a 2-year period. Primary outcome was number of days each line remained in place. Secondary outcomes were catheter-related bloodstream infection (CR-BSI) and thrombotic and technical complications. Thirty-one burn patients had 37 PICCs during the study period. Patients and controls were comparable in terms of age, TBSA burn injury, and ventilator days. The median length of time that each PICC remained in was 8.8 vs 9.3 days for CVCs ($P = .77$). The CR-BSI rate for PICCs was 0 per 1000 line days, whereas for CVCs, it was 6.6 per 1000 line days ($P = .13$). No thrombotic complications were attributed to CVCs; one PICC-associated right upper extremity deep vein thrombosis was identified (2.8% rate). No technical complications were identified in either group. The longevity and complications of PICCs in burn patients differs little from CVCs. CVCs may have a higher rate of CR-BSI in burn patients than PICCs. Although PICCs are not adequate for the fluid volumes typically required during burn shock resuscitation, they can provide a safe and effective alternative for central access in the

ongoing care of the burn patient.

