

“The use of peripherally inserted central catheter (PICC) line for central venous access in thermally injured patients has increased in recent years despite a lack of evidence regarding safety in this patient population” Austin et al (2014).

Reference:

Austin, R.E., Shahrokhi, S., Bolourani, S. and Jeschke, M.G. (2014) Peripherally Inserted Central Venous Catheter Safety in Burn Care: A Single-Center Retrospective Cohort Review. Journal of Burn Care & Research. December 10th. .

Abstract:

The use of peripherally inserted central catheter (PICC) line for central venous access in thermally injured patients has increased in recent years despite a lack of evidence regarding safety in this patient population. A recent survey of invasive catheter practices among 44 burn centers in the United States found that 37% of burn units use PICC lines as part of their treatment protocol. The goal of this study was to compare PICC-associated complication rates with the existing literature in both the critical care and burn settings. The methodology involved is a single institution retrospective cohort review of patients who received a PICC line during admission to a regional burn unit between 2008 and 2013. Fifty-three patients were identified with a total of seventy-three PICC lines. The primary outcome measurement for this study was indication for PICC line discontinuation. The most common reason for PICC line discontinuation was that the line was no longer indicated (45.2%). Four cases of symptomatic upper extremity deep vein thrombosis (5.5%) and three cases of central line-associated bloodstream infection (4.3%, 2.72 infections per 1000 line days) were identified. PICC lines were in situ an average of 15 days (range 1 to 49 days). We suggest that PICC line-associated complication rates are similar to those published in the critical care literature. Though these rates are higher than those published in the burn literature, they are similar to central venous catheter-associated complication rates. While PICC lines can be a useful resource in the treatment of the thermally injured patient, they are associated with significant and potentially fatal risks.

Thank you to our partners for supporting IVTEAM