We performed a retrospective review of all PICCs placed in the inpatient setting at our institution during a 1-year period from January 2013 to December 2013. These were divided into two groups: those placed at the bedside in the ICU and those placed by interventional radiology in non-ICU patients” Martyak et al (2017).

Abstract:

Peripherally inserted central venous catheters (PICCs) are now commonly used for central access in the intensive care unit (ICU) setting; however, there is a paucity of data evaluating the complication rates associated with these lines. We performed a retrospective review of all PICCs placed in the inpatient setting at our institution during a 1-year period from January 2013 to December 2013. These were divided into two groups: those placed at the bedside in the ICU and those placed by interventional radiology in non-ICU patients. Data regarding infectious and thrombotic complications were collected and evaluated.

During the study period, 1209 PICC line placements met inclusion criteria and were evaluated; 1038 were placed by interventional radiology in non-ICU patients, and 171 were placed at the bedside in ICU patients. The combined thrombotic and central line associated blood stream infection rate was 6.17 per cent in the non-ICU group and 10.53 per cent in the ICU group (P = 0.035). The thrombotic complication rate was 5.88 per cent in the non-ICU group and 7.60 per cent in the ICU group (P = 0.38), whereas the central line associated blood stream infection rate was 0.29 per cent in the non-ICU group and 2.92 per cent in the ICU group (P = 0.002). This study seems to suggest that PICC lines placed at the bedside in the ICU setting are associated with higher complication rates, in particular infectious complications, than those placed by interventional radiology in non-ICU patients. The routine placement of PICC lines in the ICU settings needs to be reevaluated given these findings.

Reference:

Thank you to our partners for supporting IVTEAM