Upper extremity deep vein thrombosis (UEDVT) is an increasingly recognized complication in medical inpatients with little data available regarding the incidence, risk factors and association with central venous catheters (CVC) use" Winters et al (2015).

Abstract:

BACKGROUND: Upper extremity deep vein thrombosis (UEDVT) is an increasingly recognized complication in medical inpatients with little data available regarding the incidence, risk factors and association with central venous catheters (CVC) use.

METHODS: Between 2002 and 2009 all cases of hospital-acquired venous thromboembolism (VTE) on medical services at a University hospital were frequency matched 1:2 to noncases without VTE by admission year and medical service. Records were abstracted to identify, characterize, and assess risk factors for UEDVT. Weighted logistic regression was used to calculate odds ratios (OR) for UEDVT for CVC adjusting for known VTE risk factors.

RESULTS: 299 cases of VTE complicated 64,034 admissions to medical services (4.6 per 1000 admissions). UEDVT constituted 51% (91/180) of all deep vein thrombosis (DVT), for an incidence of 1.4 per 1000 admissions (95% confidence interval 0.8, to 1.7). There were 247 CVCs placed per 1000 admissions (95% CI 203 to 292). The use of a CVC was associated with
a 14.0-fold increased risk of UEDVT (95% CI, 5.9 to 33.2), but was not associated with a significantly increased risk for PE (OR 1.3, 95% CI 0.8 to 2.1). Peripherally inserted central catheters (PICC) had a higher OR for UEDVT (OR 13.0, 95% CI, 6.1 to 27.6) than centrally inserted central venous catheters (CICC) (OR 3.4, 95% CI 1.7, 6.8).

CONCLUSION: UEDVT is a relevant complication affecting medical inpatients, accounting for half of hospital-acquired DVT. Use of CVCs was strongly associated with risk of UEDVT.

Reference:


Thank you to our partners for supporting IVTEAM