Femoral catheter as a risk factor for catheter-related thrombosis in neonates | 1

We performed a retrospective cohort study in all neonates (gestational age ≥34 wk) with CVCs. The primary outcome was the occurrence of thrombosis in CVCs. The secondary outcomes were possible risk factors for thrombosis, the thrombotic incidence in FVCs, UVCs, and PICCs, and clinical aspects of thrombosis in these groups” Dubbink-Verheij et al (2017).

Abstract:

Central venous catheters (CVCs) in neonates are associated with an increased risk of thrombosis. Most reports focus on umbilical venous catheters (UVCs) and peripherally inserted central catheters (PICCs), whereas data available on femoral venous catheters (FVCs) are limited. We performed a retrospective cohort study in all neonates (gestational age ≥34 wk) with CVCs. The primary outcome was the occurrence of thrombosis in CVCs. The secondary outcomes were possible risk factors for thrombosis, the thrombotic incidence in FVCs, UVCs, and PICCs, and clinical aspects of thrombosis in these groups.

A total of 552 neonates received a total of 656 catheters, including 407 (62%) UVCs, 185 (28%) PICCs, and 64 (10%) FVCs. Thrombosis was detected in 14 cases, yielding an overall incidence of 2.1% or 3.6 events per 1000 catheter days. FVC was significantly associated with the occurrence of thrombosis when compared with UVC (P=0.02; odds ratio, 3.8; 95% confidence interval, 1.2-12.0) and PICC (P=0.01; odds ratio, 8.2; 95% confidence interval, 1.6-41.7). The incidence of thrombosis was higher in FVCs than in UVCs and PICCS, that is, 7.8% (5/64), 1.7% (7/407), and 1.1% (2/185), respectively (P<0.01). The number of thrombotic events per 1000 catheter days was 12.3 in FVCs, 3.2 in UVCs, and 1.5 in PICCs (P<0.05). We concluded that thrombosis occurs more frequently in FVCs than in other CVCs.

Reference:


Thank you to our partners for supporting IVTEAM