The presence of central venous line (CVL) is a major contributing risk factor with conflicting data on the relative risk of DVT with various types of central lines” Dhir et al (2019).

Abstract:

An increase in the incidence of deep vein thrombosis (DVT) has been reported in pediatric patients over the past decade. The presence of central venous line (CVL) is a major contributing risk factor with conflicting data on the relative risk of DVT with various types of central lines. We aimed to assess the incidence of and identify potential risk factors for DVT overall and with different types of CVL individually. A retrospective chart review of pediatric patients with a CVL placed at Cleveland Clinic Children’s from 2011 to 2016 was conducted. Data collected included demographics, potential risk factors, CVL characteristics and related thrombotic events. The study cohort consisted of 376 CVLs in 325 patients between 0 and 26 years of age. There were 1.6 thrombi per 10,000 line-days (95% confidence interval: 1.0, 2.5), and the overall incidence of DVT was 5.1%. The incidence of DVT was highest with tunneled catheters (5/16=31%) versus with peripherally inserted central catheters (4/111=3.6%) or with ports (10/249=4%, P<0.001), and whereas there were overarching significant risk factors for CVL-associated thrombi, these risk factors differed in significance when analyzed by the CVL type. The study supports the need for continued improvement in pediatric hospital practices for early identification of patients at a higher thrombosis risk.
You may also be interested in...

Haemodialysis central venous catheter related central venous thrombosis
Central venous catheter-related venous thrombosis in children
Central venous line-related thromboembolism in children

Reference: