



Peripherally inserted central catheters(PICC) lines are becoming increasingly popular in solid cancer patients for the administration of chemotherapy. This study aims looking at the incidence of PICC line related and distant thromboembolism associated with these catheters and exploring risk factors” Al-Asadi et al (2019).

Abstract:

AIMS: Peripherally inserted central catheters(PICC) lines are becoming increasingly popular in solid cancer patients for the administration of chemotherapy. This study aims looking at the incidence of PICC line related and distant thromboembolism associated with these catheters and exploring risk factors.

METHODS: Records were reviewed for 158 patients who underwent PICC line insertion over the two years period in the medical oncology unit, Milton Keynes University Hospital. The Incidence PICC line related Deep Venous Thrombosis (DVT) which is defined as upper extremity DVT at the site of PICC line insertion was documented after checking reports of ultrasound Doppler of all symptomatic patients to confirm the presence of thrombo-embolism and Computed Tomography(CT)scan or Computed Tomography Pulmonary Angiography (CTPA) to confirm the presence Pulmonary Embolism(PE).

RESULTS: 23(13%) symptomatic patients with confirmed diagnosis by ultrasound Doppler

were found to have PICC line related DVT and similar number of patients developed distant VTE, namely PE and lower limbs DVT. Average time to thrombo-embolism from the insertion of PICC line was 13 days and 51 days in distant VTE. Statistically significant results have been identified in the term of risk factors leading to VTE events during the period of PICC line insertion.

**CONCLUSIONS:** VTE is a common complication in medical oncology patients who underwent insertion PICC line insertion for chemotherapy. Risk of distant VTE is high as well as the PICC line related DVT and the risk of the PICC line related DVT is higher in the first two weeks after PICC insertion. We concluded that high BMI, high PLTs count and Fluoropyrimidine containing chemotherapy are all significant risk factors for VTE events recorded while smoking and high BMI are significantly contributing to the high rate of the PICC line related DVT.

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### **Full Story** Reference:

Al-Asadi, O., Almusarhed, M. and Eldeeb, H. (2019) Predictive risk factors of venous thromboembolism (VTE) associated with peripherally inserted central catheters (PICC) in ambulant solid cancer patients: retrospective single Centre cohort study. *Thrombosis Journal*. January 25th. eCollection 2019.

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