

“The aim of this prospective study was to assess the reliability and the safety of PICCs over a 5-year use in non-hospitalized cancer patients requiring long-term intravenous therapies.” Cotogni et al (2014).

Reference:

Cotogni, P., Barbero, C., Garrino, C., Degiorgis, C., Mussa, B., De Francesco, A. and Pittiruti, M. (2014) Peripherally inserted central catheters in non-hospitalized cancer patients: 5-year results of a prospective study. Supportive Care Cancer. August 14th. .

Abstract:

PURPOSE: Few prospective follow-up studies evaluating the use of peripherally inserted central catheters (PICCs) to deliver chemotherapy and/or home parenteral nutrition (HPN) have focused exclusively on oncology outpatients. The aim of this prospective study was to assess the reliability and the safety of PICCs over a 5-year use in non-hospitalized cancer patients requiring long-term intravenous therapies.

METHODS: Since June 2008, all adult oncology outpatient candidates for PICC insertion were consecutively enrolled and the incidence of catheter-related complications was investigated. The follow-up continued until the PICC removal.

RESULTS: Two hundred sixty-nine PICCs in 250 patients (98 % with solid malignancies) were studied, for a total of 55,293 catheter days (median dwell time 184 days, range 15-1,384). All patients received HPN and 71 % received chemotherapy during the study period. The incidence of catheter-related bloodstream infections (CRBSIs) was low (0.05 per 1,000 catheter days), PICC-related symptomatic thrombosis was rare (1.1 %; 0.05 per 1,000 catheter days), and mechanical complications were uncommon (13.1 %; 0.63 per 1,000 catheter days). The overall complication rate was 17.5 % (0.85 per 1,000 catheter days) and PICCs were removed because of complications only in 7 % of cases. The main findings of this study were that, if accurately managed, PICCs can be safely used in cancer patients receiving chemotherapy and/or HPN, recording a low incidence of CRBSI, thrombosis, and mechanical complications; a long catheter life span; and a low probability of catheter removal because of complications.

CONCLUSIONS: Our study suggests that PICCs can be successfully utilized as safe and long-lasting venous access devices in non-hospitalized cancer patients.

Other intravenous and vascular access resources that may be of interest (External links - IVTEAM has no responsibility for content).

- [Guide for intravenous chemotherapy and associated vascular access devices from Macmillan.](#)

- [CancerUK IV chemotherapy information.](#)

