

## PICC line catheters and long-term home parenteral nutrition

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**Categories :** Intravenous Literature

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**The objective of this study was to examine a group of HPN patients with a PICC in place for more than six months, and the complications associated with PICC removal” Opilla (2017).**

Abstract:

Parenteral nutrition is administered through a central venous catheter(CVC). Peripherally inserted central catheters (PICC) are appropriate for home parenteral nutrition (HPN). The objective of this study was to examine a group of HPN patients with a PICC in place for more than six months, and the complications associated with PICC removal.

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Medical records from one home infusion pharmacy were retrospectively reviewed for PICC characteristics and complications leading to removal. Nineteen adult HPN patients had 26 PICC placements. Total PICC days were 22,262 with a mean of 856 (265-2500) days. Seven PICCs were in place for 3 to greater than 5 years. The overall complication rate was 0.58/1000 CVC days. Catheter related bloodstream infection (CRBSI) was the main cause of PICC removal. There was no evidence of symptomatic thrombosis. Patients experienced no infusion related complications. The PICCs were 88% polyurethane, 65% double lumen, and 54% were 5 Fr. No patient received alcohol or antibiotic lock therapy, and 8 patients had successful alteplase administered at least one time. All patients needed caregiver assistance for site care and dressing changes, but were independent in HPN infusion and flushing. This group of patients demonstrated that PICCs are a viable option HPN administration. The PICC overall complication rate was very low, and the most frequent complication leading to removal was CRBSI. The infection rate of 0.36/1000 CVC days is considered very low in an HPN population. This is the only HPN infusion study to date reporting 7 PICCs lasting 3 or more years, with 2 lasting greater than 5 years without complications resulting in removal. Patients received their prescribed therapy reliably and without interruption with this device. Larger studies are needed

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to confirm the efficacy of maintaining a PICC for very long-term HPN administration.

Reference:

Opilla, M. (2017) Peripherally Inserted Central Catheter Experience in Long-Term Home Parenteral Nutrition Patients. *The Journal of the Association for Vascular Access*. 22(1), p.42-45.

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