

Management of Home Parenteral Nutrition: Complications and Survival

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Abstract

Background and aims: Parenteral nutrition (PN) has become an efficient, safe, and convenient treatment over years for patients suffering from intestinal failure. Home PN (HPN) enables the patients to have a high quality of life in their own environment. The therapy management however implies many restrictions and potentially severe lethal complications. Prevention and therapy of the latter are therefore of utmost importance. This study aims to assess and characterize the situation of patients with HPN focusing on prevalence of catheter-related complications and mortality.

Methods: Swiss multicentre prospective observational study collecting demographic, anthropometric, and catheter-related data by means of questionnaires every sixth month from 2017 to 2019 (24 months), focusing on survival and complications. Data were analysed using descriptive statistics. Logistic regression models were fitted to investigate association between infection and potential co-factors.

Results: Seventy adult patients (50% women) on HPN were included (≈ 5 patients/million adult inhabitants/year). The most common underlying diseases were cancer (23%), bariatric surgery (11%), and Crohn's disease (10%). The most prevalent indication was short bowel syndrome (30%). During the study period, 47% of the patients were weaned off PN; mortality rate reached 7% for a median treatment duration of 1.31 years. The rate of catheter-related infection was 0.66/1,000 catheter-days (0.28/catheter-year) while the rate of central venous thrombosis was 0.13/1,000 catheter-days (0.05/catheter-year).

Conclusion: This prospective study gives a comprehensive overview of the adult Swiss HPN patient population. The collected data are prerequisite for evaluation, comparison, and improvement of recommendations to ensure best treatment quality and safety.

Keywords: Central venous catheter; Complication; Home parenteral nutrition; Parenteral nutrition.

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