Limited data suggest that patients with intestinal failure (IF) receiving home parenteral nutrition (PN) are at risk for vitamin D deficiency due to inadequate oral intake, poor absorption, and chronic illness. The purpose of this study was to document vitamin D status in pediatric patients with IF receiving home PN.” Wozniak et al (2014).

Reference:

Abstract:
Background: Vitamin D plays important roles in both skeletal and nonskeletal health. Limited data suggest that patients with intestinal failure (IF) receiving home parenteral nutrition (PN) are at risk for vitamin D deficiency due to inadequate oral intake, poor absorption, and chronic illness. The purpose of this study was to document vitamin D status in pediatric patients with IF receiving home PN.

Materials and Methods: We performed a 2-year retrospective review of children with IF followed at our center who had been on home PN for ≥6 months and had ≥1 serum 25-hydroxyvitamin D (25-OHD) level checked as part of routine clinical care. Patients were then categorized as deficient (

Results: Eleven of 27 children (41%) had ≥1 insufficient 25-OHD level, including one child with vitamin D deficiency. Diagnosis of short bowel syndrome (compared with dysmotility or malabsorption syndromes) was associated with decreased likelihood of suboptimal vitamin D status, with an odds ratio of 0.12 (95% confidence interval, 0.02-0.8, P = .028). Osteopenia was noted in 59% of the cohort. There was a trend toward higher risk for osteopenia in patients with low 25-OHD levels compared with those with normal 25-OHD levels (82% vs 44%, P = .109).

Conclusion: Suboptimal 25-OHD levels are common in children with IF on home PN. This emphasizes the critical importance of routine surveillance of serum vitamin D levels and
consideration of enteral supplementation when indicated.

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