The objective of this study was to compare the safety and efficacy of subcutaneous (SC) administration of parenteral nutrition with the peripheral IV route” Zaloga et al (2016).

**Abstract:**

Background: Many patients who cannot tolerate adequate enteral nutrition could benefit from parenteral nutrition support but fail to receive it due to difficult intravenous (IV) access. The objective of this study was to compare the safety and efficacy of subcutaneous (SC) administration of parenteral nutrition with the peripheral IV route.

Materials and Methods: This was a prospective randomized multicenter study of 121 older hospitalized patients. The primary outcome was the composite end point of major local side effects, defined as local edema, blistering, erythema, phlebitis, cellulitis, unbearable pain, or route failure requiring a switch in route. Secondary outcomes were nutrition parameters, biochemical parameters, clinical outcomes, and safety.

Results: The SC route (n = 59) was noninferior to the IV route (n = 61) for major local side effects. Major local side effects trended higher in the IV group (P = .059). Local edema was more common in the SC group (P < .05), while route failure was more common in the IV group (P < .001). Nutrition and biochemical parameters, safety, and clinical outcomes were similar between groups.

Conclusions: The SC route of nutrient administration was better tolerated than the peripheral IV route. SC administration of parenteral nutrition represents a safe alternative to IV nutrition.

**Reference:**


doi: 10.1177/0148607116629790

Thank you to our partners for supporting IVTEAM