

## **Herein, we evaluate the indications for and outcomes associated with TPN use in a high-volume pancreatic surgery center” Worsh et al (2017).**

Abstract:

**BACKGROUND:** Total parenteral nutrition (TPN) has historically been used conservatively in the management of patients after pancreaticoduodenectomy (PD). Herein, we evaluate the indications for and outcomes associated with TPN use in a high-volume pancreatic surgery center.

ReTweet if useful... Total parenteral nutrition in patients following pancreaticoduodenectomy <https://ctt.ec/7hb92+> @ivteam #ivteam

Click To Tweet

**MATERIALS AND METHODS:** We retrospectively queried our institution’s pancreatic surgery database for patients who received TPN after PD from 2006 through 2015.

**RESULTS:** Of 1184 patients who underwent PD, 232 (19.6%) received TPN perioperatively. The most common indications for TPN were delayed gastric emptying (DGE, n = 171, 73.7%), pancreatic fistula (n = 102, 44%), and generalized malnutrition (n = 25, 10.8%). The median day of TPN initiation was postoperative day 4 (range: -31 to 22), with a median usage of 9 days (range: 1-115). Forty-four (19%) patients received short-course TPN ( $\leq 3$  days), primarily those diagnosed with isolated grade A DGE without associated complications (P = 0.0003). Multivariate analysis suggests the presence of deep surgical site infection (odds ratio: 3.09, [1.16-5.06], P = 0.018) or pancreatic fistula (odds ratio: 2.57, [1.03-6.41], P = 0.043) at the time of DGE presentation as predictive of long-term TPN requirement. Hyperglycemia (34.5%) was the most common complication resulting from TPN use, whereas central line-associated bloodstream infections (2.6%) were rare. Readmissions (35.3% TPN cohort; 15% historical institutional rate) were most commonly due to poor oral intake (26.8%). The 30-day mortality rate in the overall TPN cohort was 3.4% (0.8% historical institutional rate).

**CONCLUSIONS:** TPN is a critical and safe adjunct for patients who develop PD-associated complications; however, it may be of limited utility for patients with isolated DGE.

Reference:

Worsh, C.E., Tatarian, T., Singh, A., Pucci, M.J., Winter, J.M., Yeo, C.J. and Lavu, H. (2017) Total parenteral nutrition in patients following pancreaticoduodenectomy: lessons from 1184 patients. *The Journal of Surgical Research*. 218, p.156-161.

doi: 10.1016/j.jss.2017.05.057.

**Thank you to our partners for supporting IVTEAM**