PRE-OPERATIVE NUTRITIONAL STATUS

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BACKGROUND

• Poor preoperative nutrition → complications
• How can we optimize nutritional status?
• What is the validity of preoperative nutrition?
• Should this delay operative intervention?
ASSESSMENT OF NUTRITION

- Anthropometry
- Unintentional weight loss > 10-15% over 6 mos
- BMI < 18.5 kg/m²
- Albumin < 3 mg/dL
- Prealbumin < 15 mg/dL
PERIOPERATIVE NUTRITIONAL SUPPORT: A RANDOMIZED CONTROL TRIAL
VON MEYENFELDT ET AL. CLINICAL NUTRITION 1992

- N = 200
- Four groups: TPN, enteral, control, non-depleted
- NI = (0.14xALB) + (0.03x%IBW) + (0.73xTLC)
- Preop nutrition reduces septic complications
- Only severe depletion should get preop nutrition
PERIOPERATIVE TOTAL PARENTERAL NUTRITION IN SURGICAL PATIENTS
THE VA TPN COOP STUDY GROUP, NEJM 1991

• N=395 malnourished pts (99% male)
• Assigned to 7-10 days of TPN vs no TPN
• Similar major complication & mortality rates
• Only give TPN to severely malnourished pts
COCHRANE REVIEW

• Of 6433 articles, 33 met criteria, 13 included
• 7 trials for IE nutrition showed reduced postop complications
• 3 trials for PN showed similar reduction in postop complications, in malnourished pts
• No difference with oral supplements
QUESTIONS

• What do we know?

• Where do we go from here?
ERAS

- Enhanced Recovery After Surgery

**Recs:**

- Preoperative carbohydrate loading
- Periop oral supplements as tolerated
- TPN in severely malnourished only (7-10d)
- Postop early feeding
CONCLUSIONS

• Don’t delay, open today!

• TPN does not close enterocutaneous fistulae

• TPN in NPO, severely malnourished pts ONLY

• Focus now enhanced postop recovery (ERAS)
REFERENCES


• Perioperative Nutritional Support: Immunonutrition, Probiotics, and Anabolic Steroids. Maung A, Davis K Apr 2012 Vol 92
REFERENCES

• Controversies in the Care of the Enterocutaneous Fistula. Davis K, Johnson E Surgical Clinics of North America Feb 2013 Vol 93