ISW26-342-03 (0582)

REVISITING DIET AND APPENDICITIS: A SYSTEMATIC REVIEW AND META-ANALYSIS

R. Pitesa[1], *M. Spiekermann*[1], *C. Paterson*[1], *A. Hill*[1,2]
[1]*The University of Auckland, Surgery, Auckland, New Zealand*
[2]*Middlemore Hospital, Surgery, Auckland, New Zealand*

Introduction:
Understanding of the aetiology of acute appendicitis (AA) has yet to converge on a single unifying theory. Low-fibre western dietary patterns (WDP) have long been thought to increase risk of AA, yet the strength and consistency of the evidence has not been quantified.

Material and Method:
A systematic review was conducted following PRISMA guidelines (PROSPERO CRD420251024372). All human studies published in CENTRAL, MEDLINE, Embase, and Scopus from inception to December 2024 were retrieved. The primary outcome investigated was incidence of AA, dietary patterns and the association between the two. Secondary outcomes included severity of AA and appendiceal microbiome changes. Risk of Bias was assessed using the ROBINS-E tool. Studies with insufficient standardised data for meta-analysis or regression were synthesised narratively.

Results:
Twenty-one studies (eight case-control, eight epidemiological, four cross-sectional, one cohort) met the inclusion criteria. Most studies were deemed to have high risk of bias. A meta-analysis of four case-control studies showed lower fibre intake in AA patients (MD -4.53 g/day [95%CI -8.50; -0.56] p = 0.02). A meta-regression of epidemiological studies (15 subgroups, 3 variance-weighted studies) suggested each additional gram of fibre daily was associated with a 34% reduction in AA incidence. A narrative synthesis of the remaining studies consistently linked low-fibre, high-meat, or sugar-dense WDPs with higher AA risk.

Conclusion:
The available evidence, although largely observational, supports an inverse association between dietary fibre and AA, while meat- and sugar-rich WDPs appear to increase AA risk.

ISW26-342-04 (0271)

PRE AND POSTOPERATIVE MAINTENANCE OF NUTRITIONAL STATUS IN PATIENTS WITH COMPLICATED PORTAL HYPERTENSION (ESOPHAGOGASTRIC VARICEAL BLEEDING) IN LIVER CIRRHOSIS: A RETROSPECTIVE STUDY

M. Tutchenko[1], D. Rydyk[1], A. Lovin[1], S. Chub[1], M. Besedinskyi[1], A. Dinets[2]
[1]Bogomolets National Medical University, Department of Surgery Dentistry Faculty, Kyiv, Ukraine
[2]National Academy of Medical Sciences of Ukraine, Department of Surgery, Kyiv, Ukraine

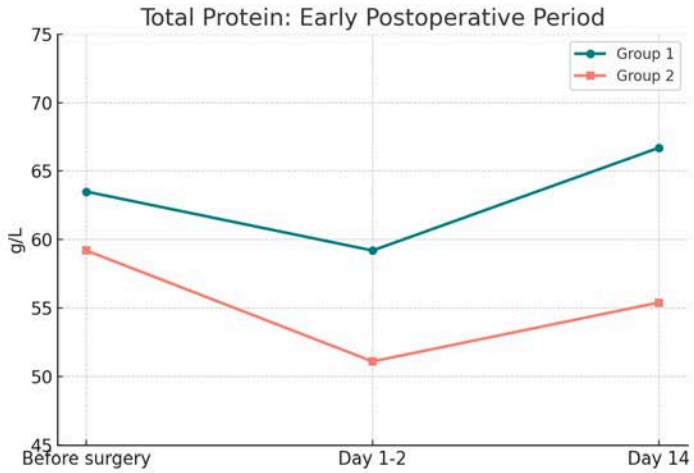
Introduction:
Esophageal and gastric variceal bleeding in patients with liver cirrhosis is associated with high morbidity and mortality. Nutritional support in the post-hemorrhagic and postoperative periods is critical, yet often delayed. This study assessed the safety and efficacy of early enteral protein nutrition (EEPN) in stabilizing protein metabolism

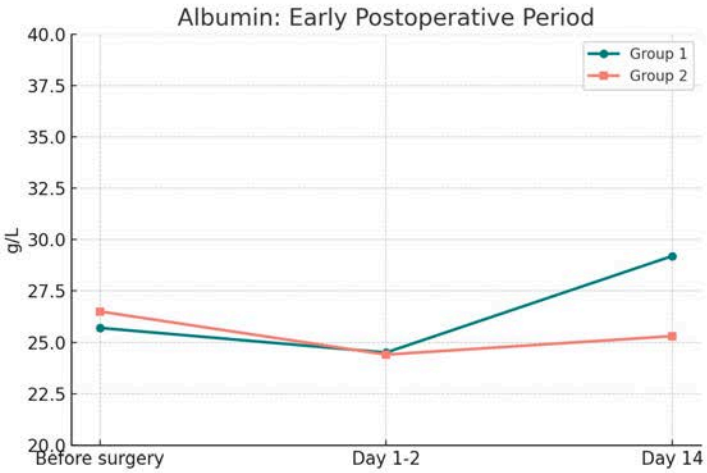
Material and Method:
A 71 patients were analyzed diagnosis of cirrhosis and variceal bleeding who underwent emergency surgery after hemodynamic stabilization. Group 1 (n=34; 2020–2024) received EEPN starting 24 hours post-bleeding and day 2 post-surgery. Group 2 (n=37; 2015–2019) received parenteral nutrition, initiating enteral nutrition from day 6. Surgical management included porto-azygous devascularization and, if needed, splenectomy. Laboratory markers (total protein, albumin) and postoperative outcomes were monitored up to 6 months.

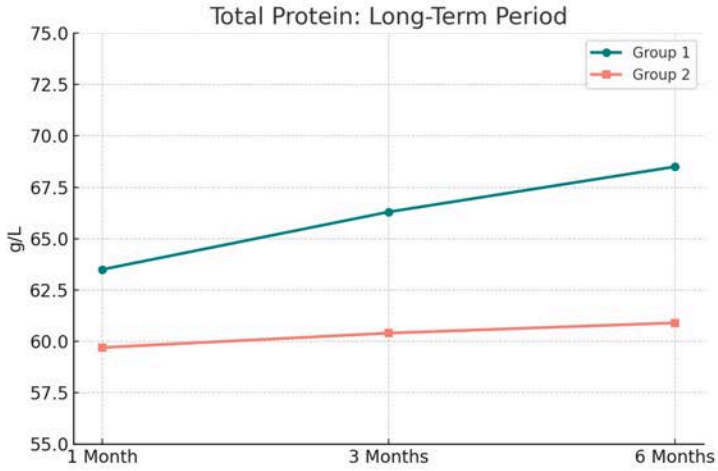
Results:
Both groups showed postoperative decreases in protein markers; however, Group 1 demonstrated significantly faster recovery of total protein and albumin ($p<0.05$), fewer postoperative complications (ascites, pneumonia, encephalopathy), and reduced hospital stay (9.7±1.3 vs. 14.6±2.3 days). EEPN did not increase the risk of rebleeding.

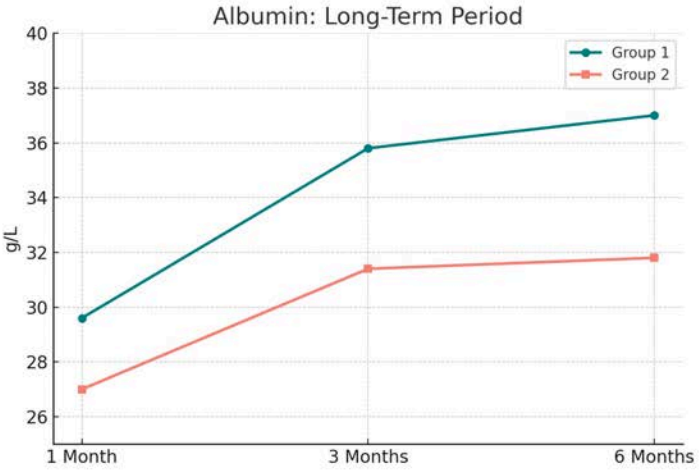
Conclusion:
Early enteral protein nutrition is a safe and effective approach for postoperative support in cirrhotic patients with variceal bleeding. It improves protein synthesis, reduces catabolism, shortens hospitalization, and decreases complication rates. EEPN should be considered a priority in nutritional strategies post-variceal bleeding surgery.

Comparison of Protein and Albumin Levels Between Study Groups









ISW26-342-05 (0564)

A RANDOMIZED CONTROL CLINICAL TRIAL TO STUDY THE ROLE OF PRE-OPERATIVE CARBOHYDRATE LOADING IN MAJOR ABDOMINAL SURGERIES

S. Grover[1], *K. Sethna*[1]
[1]*Lokmanya Tilak Municipal Medical College & General Hospital, Mumbai, Department of General Surgery, Mumbai, India*

Introduction:
It has been reported that preoperative consumption of carbohydrate-rich liquid diet reduces patient discomfort and anxiety in the perioperative period, and resulted in a shorter hospital stay. Preoperative carbohydrate loading is a contemporary element of the enhanced recovery after surgery (ERAS) paradigm. In addition to intraoperative surgical and anesthetic modifications and postoperative care practices, preoperative optimization is essential to good postsurgical outcomes. The aim of this article is to review pre-operative carbohydrate loading that may help reduce catabolism, maintain immune function and improve recovery with particular focus on carbohydrate loading and immunonutrition.

Material and Method:
Intake of 100 g of carbohydrate (800 mL of CHOD) in the evening before surgery, and 50 g of carbohydrate (400 mL of CHOD) until 2 hours before surgery [ERAS recommendation]. They were asked to consume CRLD prior to surgery as specified above. Blood samples were collected prior to and post the surgery to compare the insulin and glucose levels

Results:
There were no postoperative complications. Sixty percent of the controls and 22% of the CHO group experienced at least one episode of vomiting. Biochemical analysis showed that serum glucose ($P < 0.01$), insulin ($P < 0.01$), lactate/pyruvate ratio ($P = 0.03$), and triglycerides ($P < 0.01$) for the control group were higher than for the CHO group. The value of HOMA-IR was significantly greater ($P = 0.027$) in the conventionally fasted patients than in the CHO group.

Conclusion:
Preoperative carbohydrate loading seems to put the patient in a better metabolic state and catabolism responses are less pronounced in patients.

ISW26-342-06 (0228)

STRICTURES, STOMAS, AND STARVATION: MULTIDISCIPLINARY APPROACHES IN SURGICAL CROHN'S CARE

J. Chuah Wai Yee[1]
[1]*Hospital Queen Elizabeth, Kota Kinabalu, Department of General Surgery, Kota Kinabalu, Malaysia*

Introduction:
To explore the nutritional chalenges in a patient post-bowel resection for Crohn’s disease with a jejunal stricture, complicated by high proximal stoma output and intestinal failure. This case highlights the difficulty in maintaining nutritional balance and examines the role of parenteral nutrition, modified chyme reinfusion and distal loop feeding techniques in optimizing postoperative care and recovery in a Crohn's patient.

Material and Method:
A 60-year-old male with intestinal obstruction secondary to jejunal stricture underwent bowel resection with a double barrel stoma. The proximal stoma, 50 cm from the DJ flexure, resulted in high-output fluid and protein losses, leading to severe malnutrition (BMI dropped from 18 to 13) and complications including pneumonia, stoma retraction, catheter related infections and stormy ICU admissions. A tailored nutritional approach was employed, including parenteral nutrition and distal loop feeding. A modified technique was developed to enhance distal loop feeding efficiency, minimize leakage, and prevent tube blockage, facilitating improved chyme reinfusion and intestinal absorption during the patient’s critical recovery phase.

Results:
After 8 weeks of intensive rehabilitation involving distal loop feeding, chyme reinfusion, parenteral nutrition,and active physiotherapy, along with coordinated care from dietitians, pharmacists, doctors, surgeons, and nurses, he successfuly underwent stoma reversal and was discharged following a 6-month hospital stay.

Conclusion:
A modified technique of chyme reinfusion and distal loop feeding, combined with parenteral nutrition, significantly improved outcomes in a patient with high proximal stoma output, enabling nutritional recovery, reversal surgery and discharge. This approach highlights the importance of individualized, multidisciplinary management in complex postoperative Crohn’s disease cases


COVIDIEN
114/72


24 Fr
7-10ml