



FACTORS ASSOCIATED WITH PRE-OPERATIVE MALNUTRITION IN PATIENTS UNDERGOING PANCREATECTOMY: A PROSPECTIVE STUDY

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Background

Malnutrition is common among patients undergoing pancreatic cancer surgery. The aim of the study was to identify clinical factors associated with preoperative malnutrition in order to identify patients who may benefit from nutritional prehabilitation

Methods

Patients scheduled for pancreatectomy were prospectively evaluated (2020-2022). Clinical, biochemical and Bioelectrical Impedance Vector Analysis (BIVA) variables were collected before surgery in all patients. Malnutrition was identified through Nutritional Risk Screening (NRS)-2002 and Mini Nutritional Assessment- Short Form (MNA-SF), which are validated screening tools including questions focused on BMI, weight loss and dietary intake.

Results

Overall, 487 patients were included in the study. The MNA-SF identified 168 (34.5%) patients with a normal status, 262 (53.8%) at risk of malnutrition and 57 (11.7%) malnourished. The NRS-2002 identified 175 (35.9 %) patients with normal nutritional status, 186 (38.2 %) at risk of malnutrition and 126 (25.9%) malnourished. Clinical parameters associated with malnutrition were older age, jaundice, and cardiorespiratory comorbidities. BIVA parameters significantly associated with worse nutritional status defined by both screening tools included low phase angle, low body cell mass index, reduced fat free mass and total body water. Low serum albumin (< 35 g/l) and increased C-reactive protein levels (> 6 mg/l) were associated with poor nutritional status.

Conclusions

In patients undergoing pancreatic surgery, MNA-SF and NRS-2002 are valid screening tests to identify patients at risk of malnutrition or already malnourished as demonstrated by the association with worse BIVA parameters, suggesting they can be used to flag patients for preoperative nutritional status optimization.

