How to detect malnutrition in patients effectively?
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Malnutrition is a common problem in patients with cancer and is associated with a poor outcome. The assessment of nutritional status and its evaluation plays an important role in tailoring nutritional support. A study from South Korea evaluates the relationships between objective and subjective nutritional assessment of gastric cancer patients and suggests that a specific tailored nutritional assessment is needed for accurate measurement of the nutritional status of gastric cancer patients.

Malnutrition is an important factor, influencing both morbidity and recovery after surgery. The early detection of nutritional risk would allow early intervention, which may prevent later complications. A traditional nutritional assessment often includes dietary and medical evaluations to identify significant weight loss over time, significantly low or high body weight (BW), skinfold thickness, serum nutritional factor levels and functional measurements of muscle strength. Individually, these measurements often have limited value in accurately determining a patient's nutritional risk. As a result, combinations of diverse measurements have been developed into subjective scoring systems (Subjective Global Assessment (SGA) and Nutritional Risk Screening (NRS-2002)) designed to increase the sensitivity and specificity of nutritional status determinations. Scoring systems have been based on objective measurements of nutritional status, such as oral energy intake, BW, weight loss over time, loss of subcutaneous fat, muscle wasting, serum protein levels, and immune competence.

This research, lead by Dr. Seung-Wan Ryu and his colleagues from the Department of Surgery of Keimyung University has recently been published on July 14, 2010 in the World Journal of Gastroenterology. According to the research, the nutritional status in gastric cancer patients after gastrectomy surgery, BW, body mass index (BMI) and fat thickness were significantly reduced, but the total lymphocyte count, albumin, protein, cholesterol and serum iron levels did not decrease during the postoperative period. From this result, it can be inferred that albumin and serum protein parameters are not as sensitive as anthropometric measurements in the evaluation of nutritional status. Six months after surgery, there was a good correlation between the scoring nutritional assessment tools and the other general nutritional measurement tools (BW, BMI, and anthropometric measurements). However, 12 months after surgery, most patients who were assessed as malnourished by scoring nutritional assessment tools had returned to their preoperative normal nutritional status, although their BW, BMI, and anthropometric measurements still indicated a malnourished status.

Patients with malignant gastrointestinal disease have a high prevalence of malnutrition. In cancer, reduced food intake and an increased energy gap result in the deterioration of nutritional status. It is very important to detect malnourished patients during the preoperative period and postoperative follow-up. The author announced that not only objective nutritional parameters but also subjective scoring assessments have some limitations in the accurate measurement of nutritional status. Therefore, measuring the nutritional status of patients who have undergone gastrectomy requires a combination of objective variables (anthropometric and laboratory measurements) and a subjective scoring system during the postoperative follow-up period.

More information: Ryu SW, Kim IH. Comparison of different nutritional assessments in detecting malnutrition among gastric cancer patients. World J Gastroenterol 2010; 16(26): 3310-3317
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