WHAT ARE THE MOST EFFECTIVE METHODS FOR ASSESSMENT OF NUTRITIONAL STATUS IN OUTPATIENTS WITH GASTRIC AND COLORECTAL CANCER?

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Background: Colorectal cancer (CRC) and gastric cancer (GC) are the most common cancers in the world. Gastrointestinal tract tumors result in weight loss and require adequate monitoring of nutritional status. Several methods are used for the assessment of nutritional status in cancer patients, but no gold standard exists since these methods are not specific for this group of patients and are influenced by factors that are independent of nutritional status. Within this context, nutritional status of cancer patients is evaluated using objective methods such as anthropometric and biochemical parameters, nutritional indices and body composition measures, nutritional screening tools, and subjective methods. Aim: To evaluate methods for the identification of nutrition risk and nutritional status in outpatients with colorectal and gastric cancer, and to compare the results to those obtained for patients already treated for these cancers.

Methods: A cross-sectional study was conducted on 137 patients: group 1 (n = 75) consisting of patients with GC or CRC, and group 2 (n = 62) consisting of patients after treatment of GC or CRC under follow up, who were tumor free for a period longer than 3 months. Nutritional status was assessed in these patients using objective methods [body mass index (BMI), phase angle, serum albumin]; nutritional screening tools [Malnutrition Universal Screening Tool (MUST), Malnutrition Screening Tool (MST), Nutritional Risk Index (NRI)] and subjective assessment [Patient-Generated Subjective Global Assessment (PG-SGA)]. The sensitivity and specificity of each method was calculated in relation to the PG-SGA used as gold standard.

Results: One hundred thirty seven patients participated in the study. Stage IV cancer patients were more common in group 1. There was no difference in BMI between groups (p = 0.67). Analysis of the association between methods of assessing nutritional status and PG-SGA showed that the nutritional screening tools provided more significant results (p < 0.05) than the objective methods in the two groups. PG-SGA detected the highest proportion of undernourished patients in group 1. The nutritional screening tools MUST, NRI and MST were more sensitive than the objective methods. Phase angle measurement was the most sensitive objective method in group 1.

Conclusion: The nutritional screening tools showed the best association with PG-SGA and were also more sensitive than the objective methods. The results suggest the combination of MUST and PG-SGA for patients with cancer before and after treatment. This study was supported by Fundação de Amparo a Pesquisa do Estado de São Paulo-FAPESP 10/19191-2