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287 - THE IMPACT OF A MULTIDISCIPLINARY PREHABILITATION AND REHABILITATION PROGRAM ON VITAMIN LEVELS IN PATIENTS UNDERGOING COLON CANCER RESECTION: PRELIMINARY RESULTS FROM ONCOFIT RANDOMIZED CONTROLLED TRIAL

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Resumen

Introduction: Colon cancer is a globally prevalent pathology, with over 1,1 million new cases annually. Surgery is considered the elective treatment for these patients, yet it yields a stress response usually accompanied by posoperative complications. Low Vitamin D levels have been associated with a higher risk of posoperative complications and cancer recurrence, importantly worsening patients' prognosis. In contrast, optimal vitamin D status may enhance immune function and reduce inflammation, potentially contributing to better posoperative recovery and improved clinical outcomes. Hence, increasing vitamin D pre- and posoperatively is of clinical interest in patients with colon cancer undergoing surgery.

Objectives: This study aimed to assess the effects of a multidisciplinary prehabilitation and rehabilitation program on vitamin D levels in patients with colon cancer undergoing surgery.

Methods: This study is based on a preliminary analysis from the ONCOFIT single-centre randomized controlled trial, which included a total of 52 participants (n = 25 intervention and n = 27 control; 36.5% women). The intervention comprised a 1-month prehabilitation and 3-month rehabilitation program involving: (i) supervised concurrent exercise training, (ii) dietary behavior changes, and (iii) psychological support. Serum 25-dihidroxivitamina D levels were measured at diagnosis, preoperatively (e.g., 1 day before the operation), and 3 months post-surgery.

Results: No significant differences between groups were obtained in preoperative (mean difference: 2.91; 95%CI, -2.45 to 8.26; p = 0.290) or post-surgery vitamin D levels (mean difference: 3.04; 95%CI, -2.47 to 8.56; p = 0.282).

Conclusions: A multidisciplinary prehabilitation and rehabilitation program seems to be ineffective at increasing vitamin D levels in patients undergoing colon cancer resection. Further research with larger sample size is warranted to confirm these preliminary findings.