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MULTIDISCIPLINARY PREHABILITATION AND REHABILITATION FOR IMPROVING POSTOPERATIVE COMPLICATIONS IN PATIENTS WITH COLON CANCER: THE ONCOFIT RANDOMIZED CONTROLLED TRIAL

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INTRODUCTION

Colon cancer is the third most common malignancy worldwide, with more than 1.1 million new cases diagnosed annually. Surgical resection remains the cornerstone of curative treatment, but induces a substantial physiological stress response, often leading to postoperative complications. While multidisciplinary prehabilitation has shown benefits in reducing major complications rate, evidence regarding the combined effect of structure multidisciplinary prehabilitation and rehabilitation program on postoperative outcomes remains limited.

OBJECTIVE

To evaluate the effects of a multidisciplinary prehabilitation and rehabilitation program (PPP) on postoperative complications and clinical prognosis in patients undergoing colon cancer resection.

METHODS

Ninety patients were randomized to either the usual care group (n=46) or the PPP group (n=44). The intervention consisted on a multidisciplinary prehabilitation (4 weeks) and rehabilitation (12 weeks) program including: (i) supervised concurrent exercise training, (ii) dietary behaviour change and (iii) psychological support. Postoperative outcomes were assessed using the comprehensive complication index (CCI), the proportion of patients experiencing complications (%), and the hospital length of stay.

RESULTS

The PPP exhibited significantly lower CCI scores compared with the control group (median [IQR]: 0.00 [0.00 –12.20] vs 8.70 [0.00 –20.90]; $P = 0.014$), a lower incidence of postoperative complications (40.9% vs 71.7%; $P = 0.004$; OR = 0.273), and a shorter hospital length of stay (median [IQR]: 5 days [4-6] vs 6 days [4-6]; $P = 0.029$).

CONCLUSION

A multidisciplinary prehabilitation and rehabilitation programs substantially reduces the severity and incidence of postoperative complications and shortens hospital stay in patients undergoing colon cancer resection.

Keywords

Colon cancer, surgery, prehabilitation, multidisciplinary

Conflict of Interest & Ethical Approval

yes

Abstract submitters declaration

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