

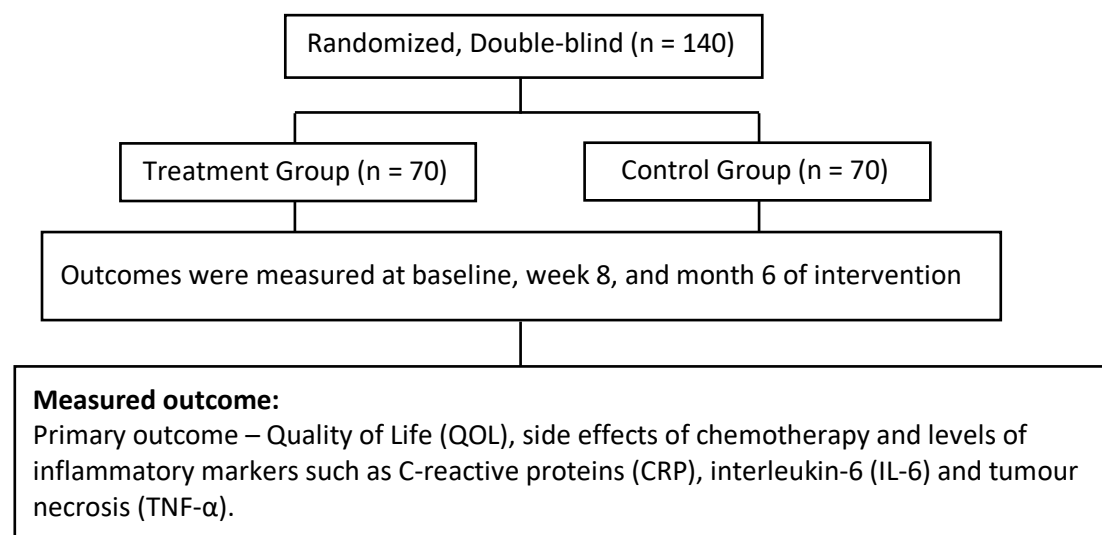
Strain-specific probiotic (microbial cell preparation) and omega-3 fatty acid in modulating quality of life and inflammatory markers in colorectal cancer patients: A randomized controlled trial

Objectives

To determine the effect of supplementation of omega-3 fatty acid and HEXBIO® in quality of life, chemotherapy side effects and inflammatory markers in colorectal cancer patients on chemotherapy.

Methods

A total of 140 colorectal cancer patients, aged 18 and above, were selected for the trials. All the subjects were on the XELOX chemotherapy regimen, which was a combination of drug therapy of capecitabine and oxaliplatin. This study was a randomized, double-blind, placebo-controlled trial. During the trials, the 140 patients were randomly and equally divided into Placebo group and Treatment group. Treatment group were administered orally with HEXBIO® and omega-3 fatty acid for 4 and 8 weeks respectively.



Outcomes

This study showed that positive improvements in the QOL parameters between Treatment group and Placebo group after intervention throughout the period of the study. Global Health status improved significantly in Treatment group after post-intervention ($p < 0.05$). In addition, Treatment group showed a significant decrease of the occurrence of various gut disorders ($p < 0.05$), such as dry mouth, taste alteration, diarrhea, nausea and vomiting, after 1 month of intervention. HEXBIO and Omega-3 as a complimentary treatment to the colorectal cancer patients on chemotherapy to improve QOL of life and promotes better clinical outcomes.

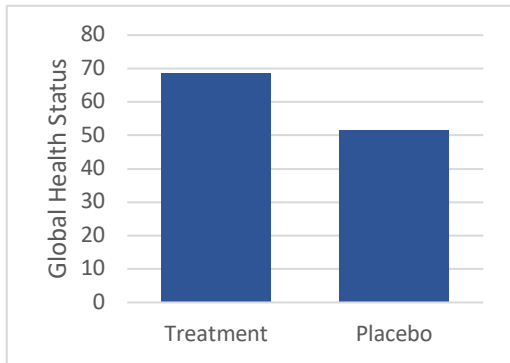


Figure 1. Comparison of Global Health Status in QOL parameters between Treatment group and Placebo group after post-intervention ($p < 0.05$).

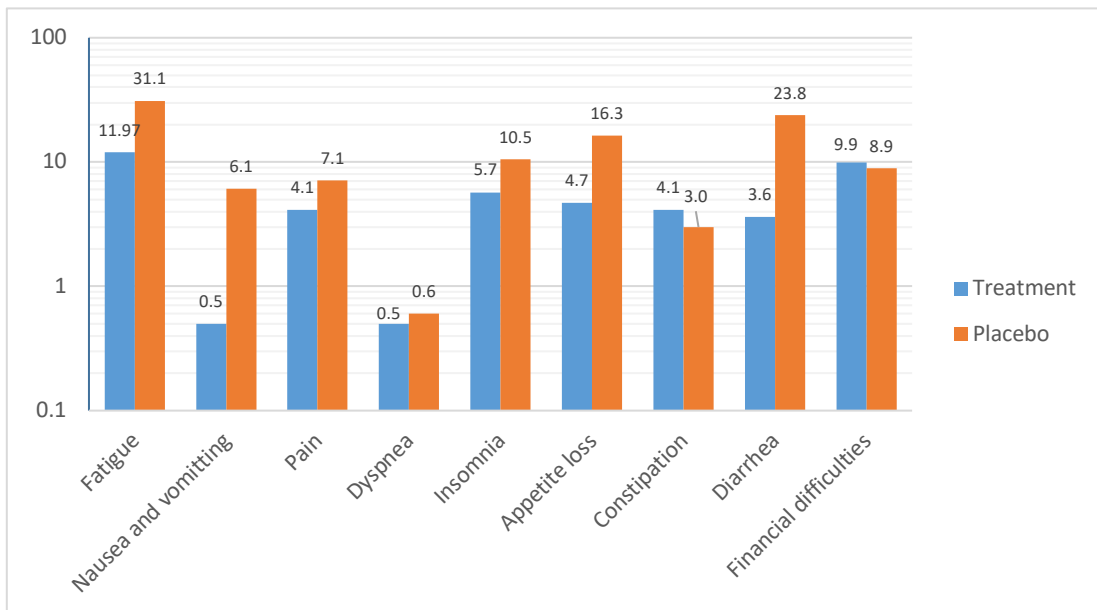


Figure 2. Comparison of symptom scales (QOL) between Treatment group and Placebo group after post-intervention (8 weeks). * $p < 0.05$ Treatment group was significantly different from Placebo group. Note: Logarithmic scale graph.

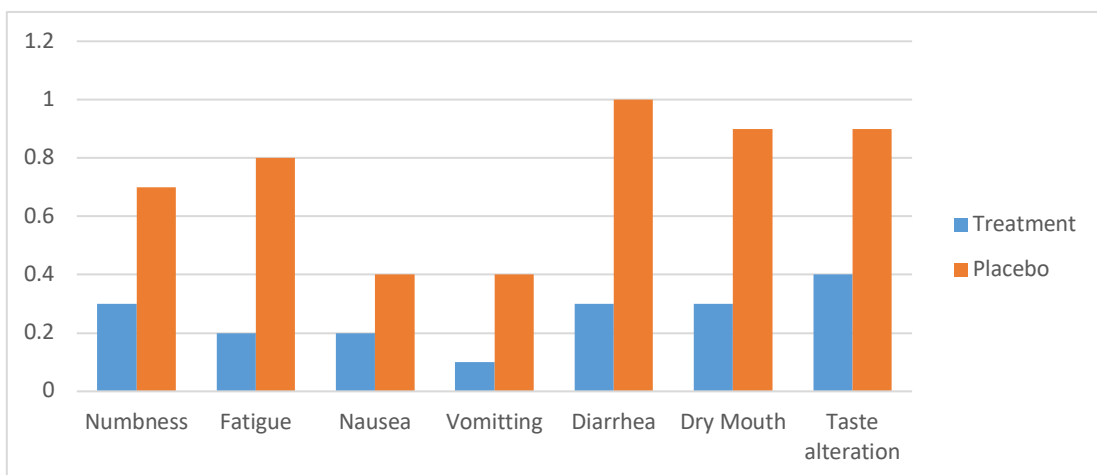


Figure 3. The occurrence of chemotherapy side effects between Treatment group and Placebo group after 1 month of intervention. Treatment group have significant improvements compared to Placebo group ($p < 0.05$).

Conclusion

This study showed that the combine supplementation of MCP and omega-3 fatty acid improved the QOL and reduced side effects of chemotherapy in colorectal patients.

Reference

Golkhalkhali, B., Rajandram, R., Paliany, A. S., Ho, G. F., Wan Ishak, W. Z., Johari, C. S., & Chin, K. F. (2017). Strain-specific probiotic (microbial cell preparation) and omega-3 fatty acid in modulating quality of life and inflammatory markers in colorectal cancer patients: A randomized controlled trial. *Asia-Pacific Journal of Clinical Oncology*, (March), 1–13. <https://doi.org/10.1111/ajco.12758>