

Role of probiotics in modulating gut function in randomized clinical trials

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Microbial cell preparation (Hexbio®) is effective in improving gut function. There were two studies been carried out to investigate the efficacy of Hexbio® where the treatment and control group of both studies given sachets containing either Hexbio® or placebo to be consumed twice daily for a week. The first study looked at the effect of Hexbio® in enteral nutrition on improving gut function, inflammatory markers and clinical outcomes in critically ill patients admitted to the intensive care unit. Patients that were admitted to the intensive care unit in University Malaya Medical Centre requiring enteral feeding were randomized. Tolerance was assessed by the time for the return of gut function. Results showed that there was a faster return of gut function in patients with the combination therapy of enteral feeding supplemented with Hexbio®. Second randomized study looked at the effectiveness of Hexbio® in improving stool frequency, stool consistency and reduces symptoms of chronic constipation according to Rome III diagnostic criteria. Follow-up was done at the end of the study period based on the given questionnaire which includes symptomatic improvement and a stool diary. There was a significant decrease in straining and in sensation of incomplete evacuation in the treated group as well as improvement in stool consistency and frequency in addition to improvement in sensation of anorectal blockage. The overall perception on improvement of symptoms among the subjects was significantly higher in the treatment group. The results from both studies indicated that Hexbio® can improve gut function in patients with either chronic constipation or with critically ill conditions in intensive care unit.