

中文題目：長期益生菌的使用對大腸息肉的影響

英文題目：The long-term effect of Probiotics use for people with colorectal polyps

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Background: Lately more and more evidences demonstrated the close association between the colorectal cancer (CRC) and gut microbiota. Gut microbiota is influenced remarkably by dietary behavior, drugs and environmental factors. Probiotics has been proven to be able to improve the composition of gut microbiota and reduce the abundance of mucosa-associated pathogens in patients with CRC, but the mechanism has not been well established until now. The aim of this study is to assess the effect of probiotic on preventing occurrence of colonic adenoma, the key role in developing CRC, and furthermore reducing CRC risk.

Method: This randomized clinical trial totally enrolled 381 patients who had colonic polyps, and 95 of them completed 3 times of colonoscopy annually. The patients with gastrointestinal malignancy, inflammatory bowel disease, and familial adenomatous polyposis were excluded. Adequate colon preparation and good colonoscopy quality presented in each colonoscopy, and all colonic polyps noted in the examinations were completely removed. The patients were divided into group A (n=48) and group B (n=47) (Figure 1). Group A was defined as the patients receiving CBM588 in the first year and without receiving CBM588 in the second year. Group B was defined as the patients without receiving CBM588 in the first year, and receiving CBM588 in the second year. The washout period between first year and second year was 3-month.

Results: The patients in group A had lower occurrence rate (31.3%, after 1-year CBM588) than group B (44.7%, without CBM588) in the first colonoscopy follow-up. In group A, decreasing adenoma occurrence rate was also noted in the second colonoscopy follow-up (20.8%) even without CBM588 use in the second year. In group B, adenoma occurrence rate presented significant decrease ($p=0.044$) in the colonoscopy follow-up (29.8%, after 1-year CBM588), compared to the first colonoscopy follow-up (44.7%, without CBM588)

Conclusion: CBM588 showed potential and continued effects on prevention of colonic adenoma recurrence in this study, which could block the adenoma-carcinoma sequence in CRC developing. Nevertheless, we still need larger-scale study and longer period follow-up to confirm stronger causal relationship between probiotics and colonic adenoma occurrence.