

Institutional review board statement:

Fecal microbiota in pouchitis and ulcerative colitis

Li KY et al, 2016

The study was reviewed and approved by Tianjin Medical University General Hospital Institutional Review Board, Tianjin 300052, China.

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Authorization of the Ethical Committee of Tianjin

Medical University General Hospital

Ethical NO. 201361

Article title: Fecal microbiota in pouchitis and ulcerative colitis		
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Assume unit: Tianjin Medical University General Hospital		Application date: June, 2013

Abstract:

Aim: To investigate the changes in fecal microbiota in UC and pouchitis by genomic technology.

Methods: Fecal samples were collected from healthy persons and UC patients with or without IPAA procedure. Touchdown polymerase chain reaction technique was used to amplify the whole V3 region of the 16S rRNA gene in deoxyribose nucleic acid (DNA) extracts from fecal samples. Denaturant gradient gel electrophoresis (DGGE) was employed to separate the amplicons. The band profiles and similarity indices were digitally analyzed. The predominant microbiota in the groups was confirmed by sequencing the 16S rRNA gene.

Results: Microbial biodiversity in healthy people was significantly greater in comparison with UC groups ($P < 0.001$) and IPAA groups ($P < 0.001$). Compared with normal, remission and mildly active UC, the predominant species of moderate and severely active UC changed obviously. Besides, the proportion of the dominant microbiota was decreased in pouchitis, which was negatively correlated with disease activity of UC ($r = -6.591$, $P < 0.01$). Greater number of *B. vulgatus*, *R. gnavus* and *C. perfringens* were showed in pouchitis. Patients with pouchitis have altered composition of microbiota compared with UC patients. Microbiota from pouchitis was fewer than in UC patients with a severe condition. Sequencing results in both UC and pouchitis shared similar microbiota such as *B. vulgatus* and *C. perfringens*.

Conclusion: Less diverse fecal microbiota was present in UC and pouch patients. Increase in fecal *C. perfringens* may play a role in exacerbation of UC and pouchitis.

Comments of Examination: After examination, "**Fecal microbiota in pouchitis and ulcerative colitis**", conform "International ethical guidelines for biomedical research involving human subjects (2002)" developed by Council For International Organizations Of Medical Sciences (CIOMS) in collaboration with World Health Organization (WHO), researches in this article are approved.

Ethical Committee
Tianjin Medical University General Hospital
Tianjin, China
June, 2013