

Complex bacteriotherapy in pediatric gastrointestinal disorders

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Recent studies have shown the efficacy of complex bacteriotherapy, such as fecal microbiota transplantation (FMT), for the treatment of antibiotic refractory *Clostridium difficile* colitis (*C. diff*). Serial FMTs have been indicated to potentially cure chronic inflammatory intestinal disorders, such as ulcerative colitis (UC) as well. In the meantime, this therapeutic option has been rarely explored in children while they suffer from treatment refractory *C. diff* and UC as well. We have recently developed pediatric protocols for intestinal microbiome transplantation (IMT, same as FMT) with frozen filtered stool preparations. The preparations were used with success in a case of moderate to severely active pediatric UC complicated by *C. diff* infection, and in a case of infliximab dependent UC where the patient was able to stop all conventional therapies. The therapeutic efforts were supported by 454 based pyrosequencing of the fecal and colonic mucosal microbiomes. Our findings will promote the establishment of complex (community based) bacteriotherapy in the management of pediatric gastrointestinal disorders.

Biography

Richard Kellermayer has earned his M.D. and Ph.D. at the University Medical School of Pecs, Hungary. He completed pediatric residency at the Buffalo Children's Hospital, State University of New York, a medical genetics fellowship in the University Medical School of Pecs, Hungary, and a pediatric gastroenterology fellowship at Baylor College of Medicine, Houston, Texas. He is currently an assistant Professor at the Baylor College of Medicine working as a clinician scientist. He has over 60 peer reviewed publications in the fields of human and microbial molecular genetics, mammalian (including human) epigenetics and metagenomics, and pediatric gastrointestinal disorders.

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