

# Fecal Microbiota Transplantation



Gastroenterology was the focus of an article appearing in the December 1, 2014 issue of *The New Yorker*. “The Excrement Experiment,” by Emily Eakin, examined fecal microbiota transplantation. The article began with a description of a patient with Crohn’s disease, who asked his neighbor to be a stool donor. The patient’s doctor was unable to offer any guidance regarding the procedure, so the patient did his own research and learned how to administer the transplant himself. Different perspectives on the procedure were provided by interviews with a variety of interested parties—including the patient with Crohn’s disease, his stool donor, the founders of a stool bank, an anthropologist conducting field research among a tribe of hunter-gatherers in Tanzania, a microbiologist, and several of our colleagues in gastroenterology. The issues raised by the US Food and Drug Administration’s categorization of stool as a drug and not a tissue were also considered. The article ended where it began, with a quotation from the Crohn’s disease patient. Fecal microbiota transplantation did not cure his disease, but his response was so positive that he planned to continue with the transplants indefinitely.

A point made in the article is that patients may be undertaking fecal microbiota transplantation without the care and/or guidance of a gastroenterologist. The most common use of fecal microbiota transplantation has been in patients with recurrent *Clostridium difficile* infection, but as the procedure grows in popularity, other types of patients in your practice may become interested. This issue of *Gastroenterology & Hepatology* includes a feature article by senior authors Dr Woo Jung Lee and Dr Lakshmi D. N. Lattimer and colleagues that reviews the emerging indications for fecal microbiota transplantation beyond relapsing *C difficile* toxin colitis. After reviewing the human microbiota and fecal transplantation techniques, the authors discuss the current data examining the use of this procedure in several conditions, including inflammatory bowel disease, irritable bowel syndrome, diabetes mellitus, central nervous system diseases, immune-mediated diseases, autism, and depression. Research continues to elucidate the links between dysregulation of the microbiota and disease states—both gastrointestinal and nongastrointestinal. The authors conclude that fecal microbiota transplantation shows great promise in many diseases, but further studies are mandatory.

In another feature article, Dr Paul Fitzmorris and Dr Ashwani K. Singal discuss surveillance and diagnosis of hepatocellular carcinoma, the third leading cause of cancer-related death worldwide. Physicians continue to underutilize surveillance techniques, which can identify hepatocellular carcinoma at an early stage and thereby improve prognosis. A practical approach to therapeutic drug monitoring in children and young adults with inflammatory bowel disease is provided by Dr Namita Singh and Dr Marla C. Dubinsky in their feature article. The authors state that it is critical for prescribers to recognize that standard dosing is insufficient for most patients, given the interindividual variability in response and tolerability. Young patients in particular will benefit from such monitoring, based on the limited number of medications available for them and the need for effective, long-term treatment strategies.

In our Advances in Endoscopy column, Dr Matthew D. Rutter describes his study on the effect of previous hysterectomy on colonoscopy. These patients are more likely to experience moderate or severe discomfort during the procedure, and Dr Rutter provides suggestions on how to improve outcomes. Dr Kris Kowdley discusses spontaneous bacterial peritonitis in our Advances in Hepatology column. This condition, which can develop in patients with cirrhosis, can be fatal if left untreated. Because most patients are infected with gram-negative or enteric bacteria, effective management options are available. In our Advances in GERD column, Dr Nicholas J. Shaheen examines the prevalence and treatment of Barrett esophagus and its link to esophageal adenocarcinoma. Dr Asher Kornbluth discusses the use of budesonide extended-release in patients with mild to moderate ulcerative colitis in the Advances in IBD column.

I hope you find this issue interesting and informative. Happy New Year!

Sincerely,

Gary R. Lichtenstein, MD, AGAF, FACP, FACG