Tempered Enthusiasm for Fecal Transplantation?

TO THE EDITOR—We read the case report by Solari et al [1] with great interest because the authors presented a fatal case of relapsing *Clostridium difficile* infection treated with fecal microbiota transplantation (FMT) using a gastrojejunostomy tube. This tube was placed through an already existing gastric feeding tube, and the patient died 4 days later due to septic shock; *Pseudomonas aeruginosa*, *Escherichia coli*, and *Lactobacillus casei* grew in blood culture. Although this deadly progression tempered the authors’ enthusiasm regarding FMT, 2 considerations should be taken into account before drawing such a conclusion.

First, although the position of the tip of the gastrojejunostomy tube near the ligament of Treitz was confirmed by contrast injection under fluoroscopy and routine abdominal radiography just prior to the fecal instillation, during the emergent surgical procedure 3 days later, the gastrostomy tube was found to be dislodged, causing pneumoperitoneum. It is therefore unclear whether donor feces reached the targeted stomach/duodenum, or the peritoneal cavity, leading to septic shock. The latter may also explain the missing effect of FMT and suspected deterioration of *C. difficile* infection with megacolon after stopping fidaxomicin and metronidazole. Therefore, we believe it is very likely that septic shock was caused by the dislodged gastrojejunostomy tube and challenge the hypothesis of the authors that stopping antimicrobials for treatment of *C. difficile* was responsible.

Second, we wonder that the authors applied FMT using a gastrojejunostomy tube, as this route has been considered to have lower success rates compared with application into the colon [2]. Although infusion of donor feces through a nasoduodenal tube has been successfully used previously [3, 4], fatal outcome due to pneumonia and peritonitis after application of donor feces in the upper gastrointestinal (GI) tract has already been reported [5].

We conclude that the presented case adds to the knowledge that FMT administered through the upper GI tract is potentially life threatening. Because colonoscopic application of FMT offers assessment of colonic mucosa and control of correct donor feces placement [6], we suggest this to be the preferred route of application. Furthermore, *C. difficile* infection is a disease affecting the colon and therefore the rationale of administration of donor feces to the upper GI tract has been questioned [6]. We are not enthusiastic about the procedure, but are grateful to have FMT available for certain therapy-resistant cases of *C. difficile* infection.

**Note**

**Potential conflicts of interest.** All authors: No reported conflicts.

All authors have submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest. Conflicts that the editors consider relevant to the content of the manuscript have been disclosed.

Christoph Högenauer,1 Patrizia Katharina Kump,1 and Robert Krause2

1Division of Gastroenterology and Hepatology, and 2Section of Infectious Diseases and Tropical Medicine, Department of Internal Medicine, Medical University of Graz, Austria

**References**


