

1654. Fecal Microbiota Transplant for the Treatment of Recurrent *Clostridium difficile* Infection via Encapsulated Cryopreserved Concentrated Fecally Derived Bacteria: A Cohort Review

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Background. *Clostridium difficile* infection (CDI) is a common and dangerous illness with a profound medical and economic impact. With the evolution of hypervirulent strains, standard antibiotic approaches are ineffective for increasing numbers of patients with recurrent CDI. Fecal microbiota transplant (FMT) is an effective strategy which utilizes the complex fecal microbiota of a healthy donor, providing exogenous bacterial flora as a therapeutic agent. Although FMT is already being more widely utilized, there is limited data assessing the effectiveness of an orally administered encapsulated modality. We reviewed the response of a cohort of patients that received cryopreserved concentrated fecally derived bacteria by capsules to evaluate the efficacy of this novel therapeutic approach.

Methods. A total of 19 patients with recurrent CDI were identified from April 2013 to February 2014 as candidates for FMT. Patients' ages ranged from 27-92 years. In an outpatient setting, under direct supervision, the patients were asked to swallow approximately 10 capsules. Post transplant, they were monitored for any adverse events and followed to assess clinical status. They were monitored for any post transplant symptoms with primary end point being resolution of CDI without relapse within 90 days.

Results. The overall cure rate was 90%. 13 patients (68%) had resolution after the first transplant; of the 6 patients that did not respond to the initial treatment, 4 went on to have resolution after subsequent transplantation. Abdominal pain was the only side effect reported post procedure by 5 subjects, or 26%. Of note, one of the 2 patients that did not achieve remission later died from complications of health-care acquired pneumonia which was not considered to be related to the study procedure.

Conclusion. In this retrospective study we found that FMT with oral capsules is highly effective against recurrent CDI. Although one third of the cases required repeat transplant, the procedure was well tolerated with an overall cure rate of 90%; with transient epigastric discomfort noted in 5 instances. This procedure offers an aesthetic, non-invasive, effective and cost efficient option for treatment of recurrent and persistent CDI.

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