Fecal microbial transplantation

Figure 1. **A**, Materials needed for fecal microbial transplant (FMT). **B**, Preparing the blender. **C**, Filtering blended specimen through a coarse colander. **D**, Instilling donor specimen via colonoscopy. **E**, Endoscopic view of specimen instillation.

The first documented case of *Clostridium difficile* colitis (CDC) treated with fecal microbial transplantation (FMT) was reported in 1983. Since then, this technique has gained popularity, and one of the pivotal reasons for that has been the emergence of newer, more virulent, and antibiotic-resistant strains of *C difficile*. Despite this, the technique is not universally available. Furthermore, the lack of standardization in stool collection, preparation, and administration processes poses unique challenges. Given the paucity of stool banks and the unusual nature of the transplant, finding a suitable donor is the most important limiting factor.

In [Video 1](http://www.VideoGIE.org) (available online at www.VideoGIE.org), we describe the whole process from stool collection to preparation and administration in a stepwise manner ([Fig. 1](#)). The final stool suspension can be instilled either by upper endoscopy or by colonoscopy, both of which have been detailed.

Inasmuch as the U.S. Food and Drug Administration has classified human stool as a biologic agent, its use will require a protocol to be in place. Many institutes may need institutional review board approval as well. The technique itself does not require advanced training, and we hope our video will ease the adoption of this technique.

Written transcript of the video audio is available online at www.VideoGIE.org.

The idea of altering the intestinal microbiome for recurrent CDC is a novel concept, and establishing standardized protocols will go a long way toward making the therapy more accessible to the masses. However, we need more studies to address the unanswered questions regarding the long-term potential infectious and immunologic effects caused by gut microbial changes.

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