

Fecal microbiota transplantation for recurrent *Clostridium difficile* infection

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1 Fecal microbiota transplantation is an effective treatment for recurrent *Clostridium difficile* infection

Multiple randomized controlled trials show that fecal microbiota transplantation is 44%–96% effective in resolving recurrent *C. difficile* infection in patients with two or more recurrences.¹ This is comparable or superior to conventional treatment with vancomycin taper and pulse, which is about 60% effective.² Caution should be used in administering fecal microbiota transplantation to immunocompromised and severely ill patients, because safety has not been well-established in these groups.

2 Most fecal microbiota transplantations are performed by gastroenterologists and infectious disease specialists

In Canada, fecal microbiota transplantations can be performed by any health care practitioner who is licensed to treat patients with a prescription drug.³ However, owing to the expertise required for donor screening, diagnosing recurrent *C. difficile* infection and providing fecal microbiota transplantation, most of these treatments are provided by specialists who have specific interest in fecal microbiota transplantation.

3 Donors should be rigorously screened

Health Canada provides rigorous donor-screening guidance focused on minimizing risks of bloodborne, enteric and sexually transmitted infection.³ Some fecal microbiota transplantation programs additionally exclude donors with personal or family histories of diseases associated with disrupted intestinal microbiota, such as obesity and depression. At a large US stool bank, less than 3% of prospective donors pass screening.⁴

4 There are four ways to administer fecal microbiota transplantation

Fecal microbiota can be delivered by enema, colonoscopy or through a nasoduodenal tube. Capsules are under development but are not yet commercially available. Currently, no data suggest superiority of one route of administration over another.¹

5 The long-term health effects are unknown

Although short-term safety in resolving recurrent *C. difficile* infection has been established,¹ the long-term health impacts of fecal microbiota transplantation are still under investigation. Emerging research suggests the intestinal microbiota may influence various metabolic, mental health, autoimmune and other disease states.⁵ Patients should be counselled on these potential risks.

References

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