



Care after your fecal transplant

Congratulations on undergoing your fecal microbiota transplant. Your doctor will talk to you about possible adverse effects after your procedure. These might include abdominal pain, fever or bleeding. Also, you may again experience diarrhea. Be sure to contact your doctor if you experience any of these symptoms after your treatment.

Most patients are very worried about reinfection after they have finally recovered from a *C. difficile* infection. The good news is that most patients who have undergone a fecal transplant do not experience symptoms from *C. difficile* infection again. If you feel well and have well-formed stool, the treatment was successful. The following tips can help minimize your risk of reinfection or of infecting others, and offers suggestions for how to talk to your doctor about future uses of antibiotics.

Disinfecting your home

Clostridium difficile infection is caused by the transmission of bacterial spores that can survive on household surfaces for a long time. You may have already thoroughly cleaned your home before your procedure, but if not, it is a good idea to do so now.

Using the Right Cleaning Agent

Traditional household cleaning products will NOT kill *C. difficile* spores. When in spore form, *C. difficile* cells act like hardy seeds and are resilient against common cleaning agents. Instead, use an Environmental Protection Agency (EPA)-registered disinfectant with a *C. difficile*-sporicidal label claim. These disinfectants can be:

- Any chlorine-containing cleaning agents at a concentration of at least 5,000 ppm
- Household bleach (diluted with one parts bleach to 10 parts water)

The EPA website has a full list of accepted disinfectants posted here:

http://www.epa.gov/oppad001/list_k_clostridium.pdf.

Proper Disinfection Methods

Use the following guidelines to clean bathrooms, bedrooms, and other contaminated areas:

- Remove any visible feces with a sponge or rag prior to disinfecting a surface or fabric.
- Using a clean cloth or sponge, thoroughly wet any contaminated surfaces with the appropriate cleaning agent. Scrub forcefully.

- Allow at least 10 minutes of contact between a surface and disinfectant; if possible, allow the surface to air dry.
- High-touch surfaces including toilets, faucets, and showers require special attention.
- Dispose of any soiled cleaning materials including cleaning cloths or sponges.

Protecting Yourself

Always wear appropriate barrier protection when cleaning household areas that may be contaminated. It is recommended that you wear disposable gloves. You may also wear a face mask, gown and eye covering as well if you wish to use added protection. Wash your hands with soap and water following exposure to contaminated areas, even if you wore gloves.

If you live in an assisted living residence, speak with the director of your facility to ensure that the appropriate measures are taken to disinfect your living environment, and that those caring for you and your personal items wash their hands with soap and water before doing so. Is it acceptable to ask them if they did! Common rooms and shared spaces should be cleaned as well as bedrooms and bathrooms.

Communicating with your doctor

It is important to inform your medical care providers that you have undergone a fecal transplant to treat *C. difficile* so that they may factor your history into their decisions about your care.

Antibiotics

Taking antibiotics after FMT increases the risk of recurrent *C. difficile* infection; however, you may require antibiotics at some future time, when the benefits of the antibiotic therapy outweigh the risks they pose. All antibiotics pose a risk of *C. difficile* infection following a fecal transplant, but some are thought to be more harmful than others. If you do need to take antibiotics, talk to your doctor about whether a lower-risk antibiotic will be suitable for your treatment. Below are a few examples, though your doctor will prescribe the most suitable antibiotic for your treatment:

- **Lower-risk antibiotics:** metronidazole, aminoglycosides, vancomycin, chloramphenicol
- **Medium-risk antibiotics:** tetracyclines, sulfonamides, macrolides, and teicoplanine
- **High-risk antibiotics:** penicillins, cephalosporins, carbapenems, quinolones and clindamycin

Questions to ask your doctor about any new medications:

- Is this an antibiotic?
- I have a history of recurrent *C. difficile*; will taking this medication put me at undue risk?
- Can I avoid antibiotic treatment? Are there other treatment options, such as using one of the lower-risk antibiotics (above)? Is it possible to wait and see if my condition improves before taking this antibiotic?

Probiotics and Antibiotics

If antibiotic treatment is unavoidable, you may wish to use a probiotic alongside the antibiotic. There is some early evidence to suggest the probiotic *Saccharomyces boulardii* ("Florastor") may reduce the risk of *C. difficile* infection when taken with certain antibiotics, but more research is needed.^{i, ii} If you do wish to try probiotics, talk to your doctor and he/she may consider the following regimen:

- Begin taking *S. boulardii* 48 hours before starting antibiotic treatment, if possible, or if not, begin them at the same time; continue to take the probiotic throughout your course of antibiotics, and for 2 days after antibiotic treatment ends.
- Take a probiotic capsule twice a day, 2 hours after eating.
- If probiotics are unavailable, you may also try eating 2-4 cups of yogurt or kefir daily.

Taking probiotics is not recommended if you are pregnant or immunocompromised.

Which other medications should be avoided after FMT?

- Anti-motility medicationsⁱⁱⁱ
- Proton pump inhibitors (for some medical conditions)^{iv}

Review your use of these medications with your doctor.

Support and Getting Involved

As you know all too well, recurrent *C. difficile* infection can have a devastating impact on one's life. Hopefully, your fecal transplant has set you on the road to recovery. If you would like to become more involved in efforts to make safe access to fecal transplants more widespread, there are several ways for you to become involved. Below are lists of patient advocacy groups and support groups working to bring fecal transplants to patients who need it.

- **The Fecal Transplant Foundation:** a resource and advocacy site run by a team of volunteer physicians, healthcare professionals and patients to promote safe access to FMT. To volunteer or to make a donation to the foundation, please visit www.thefecaltransplantfoundation.org

- **The Power of Poop:** a large information site for patients, by patients on FMT and microbiome health (www.thepowerofpoop.com)
- **C. Difficile Support Group:** a forum for non-medical support and advice related to *C. difficile* (www.cdifffdiscuss.org)
- **Peggy Lillis Memorial Foundation:** dedicated to preventing families from losing loved ones to *C. difficile* (www.peggyfoundation.org)

Working with OpenBiome

OpenBiome is a 501(c)3 nonprofit working on many fronts to make sure that fecal transplants are widely available—we provide pro-bono treatments to patients in need, and provide the rest of our material at cost. We also support research into using fecal transplants to treat other diseases, and are working with policymakers, academics, and medical associations to advocate for policies that will make sure fecal transplants are safe, low-cost, and widely available.

Ideas and Stories

No one knows more about fecal transplants than patients and their doctors, and we would love to hear your ideas on how we can improve our service. As well, we do what we do because we know what a difference a fecal transplant can make. Nothing inspires us more than hearing stories from the patients we treat. If you'd like to brighten our day by telling us how we helped your recovery, we would be glad to hear from you. You may reach us at info@openbiome.org.

Financial

If you would like to contribute towards another patient's treatment, or would like to further our research mission or advocacy work, we would be grateful for your support. Donations are tax deductible. All contributions go towards scaling our organization to ensure safe, low-cost access to FMT for all patients in need. We accept financial donations through our secure donations page at www.openbiome.org/contribute. You may also write to us at giving@openbiome.org or at:

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ⁱ Pozzoni, P. *et al.* *Saccharomyces boulardii* for the prevention of antibiotic-associated diarrhea in adult hospitalized patients: a single-center, randomized, double-blind, placebo-controlled trial. *Am J Gastroenterol.*, **107**, 922-31 (2012)

ⁱⁱ Goldenberg, J. *et al.* Probiotics for the prevention of *Clostridium difficile*-associated diarrhea in adults and children. *Cochrane Database Syst Rev.*, **31**, 5 (2013).

ⁱⁱⁱ Koo, H. *et al.* Antimotility agents for the treatment of *Clostridium difficile* diarrhea and colitis. *Clin Infect Dis.* **48**, 598-605 (2009).

^{iv} Biswal, S. Proton pump inhibitors and risk for *Clostridium difficile* associated diarrhea. *Biomed J.*, **37**, 178-83 (2014)