



York and Scarborough  
Teaching Hospitals  
NHS Foundation Trust

# Faecal Microbiota Transplant (FMT)

Information for patients, relatives and carers

① For more information, please contact:

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<b>Contents</b>	<b>Page</b>
What is Clostridioides difficile? .....	4
Treatment of C. diff infection using antibiotics.....	4
What is Faecal Microbiota Transplantation (FMT)?.....	5
Treatment of C. diff infection with FMT .....	5
What does FMT involve? .....	6
Who provides the stool sample that is used in FMT?.....	7
What are the risks? .....	7
What happens after FMT? .....	8
Are there any alternatives? .....	8
Giving my consent for FMT.....	9
Tell us what you think of this leaflet .....	10
Teaching, training and research.....	10
Patient Advice and Liaison Service (PALS).....	10
Leaflets in alternative languages or formats .....	12

# What is Clostridioides difficile?

Clostridioides difficile (C. diff) are bacteria that live in the bowel (also known as the gut). In a healthy person, C. diff bacteria can live amongst normal bacteria in the gut and do not cause disease. However, if the number of normal bacteria are reduced, e.g. by the use of antibiotics to treat other infections, then the numbers of C. diff can increase and cause disease.

What are the symptoms of C. diff infection?

The main symptom of C. diff infection is diarrhoea. Others are fever, loss of appetite, nausea and abdominal pain. Rarely, it can cause life-threatening inflammation of the bowel.

## Treatment of C. diff infection using antibiotics

Antibiotics, such as vancomycin and fidaxomicin, kill the C. diff bacteria in most people. However, one in five people (20%) experience further symptoms after stopping treatment. This is called a recurrence.

Recurrence occurs when the normal gut bacteria do not return to healthy levels, allowing any remaining C. diff bacteria to cause infection again. In patients who have had a recurrence, the chance of a further episode of C. diff infection rises to one in two (50%).

# **What is Faecal Microbiota Transplantation (FMT)?**

FMT involves the transfer of healthy bacteria in a processed stool sample from a healthy donor to the intestine (gut) of a patient. The aim is to restore a normal balance of bacteria in the gut of a patient with *Clostridioides difficile* infection.

## **Treatment of *C. diff* infection with FMT**

FMT is used as a treatment for patients who have had two or more episodes of *C. diff* infection. It has been shown to cure the infection and prevent further episodes in seven to nine of every ten patients with recurrent *C. diff* (70-90%). This compares to 30-40% of patients treated with antibiotics. If it does not work the first time it can be repeated; it is more likely to be effective a second, or subsequent, time.

FMT works by repopulating the gut with normal bacteria from the donor stool. This prevents *C. diff* from multiplying and causing infection.

## **What does FMT involve?**

Patients taking antibiotics for *C. difficile* infection are asked to stop them the evening before their FMT.

During the procedure, a liquid preparation of the donor stool sample is administered in one of two ways. Most commonly, it is via a nasogastric tube. This is a thin tube that is passed via the nose and throat into the stomach, before the procedure. It is left in for an hour after the FMT, then removed. Having a nasogastric tube does not stop you from taking their normal medication, unless advised otherwise by your doctor.

The alternative way of administering FMT is via colonoscopy. In an endoscopy, a flexible tube with a camera on the end (known as an endoscope) is swallowed and passes down your gullet, through your stomach and into your small bowel. Here the donor stool sample is passed down the channel of the endoscope and it will work its way to your large bowel to take effect.

In a colonoscopy, the endoscope is passed up the rectum (bottom) into the colon. Colonoscopy is used if FMT via a nasogastric tube does not work. If your doctor recommends this route for administering FMT, you should receive a separate information leaflet describing what colonoscopy involves.

## **Who provides the stool sample that is used in FMT?**

The donors are anonymous, healthy adults, between the ages of 18 and 50, without health problems who lead healthy lifestyles. Their stool samples are tested to ensure they are free from a wide variety of viral, bacterial, and parasitic infections. The stool samples are prepared by a laboratory at the University of Birmingham.

## **What are the risks?**

There is a theoretical risk of transmitting infection via the donor stool, despite extensive testing before it is used. However, there have been no cases of transmission of infection through FMT in the UK. Some patients having FMT via a nasogastric tube worry they might be able to taste the stool sample, but this does not happen. A few patients may experience minor side effects including fever, bloating, nausea, vomiting and constipation after the FMT. These side effects normally only last for one or two days.

If FMT is delivered by a nasogastric tube there is a very small risk of perforating the gullet or stomach when placing the tube. There is also a risk of misplacement of the tube into the lungs. Steps are taken to ensure correct placement of the tube in the stomach.

For risks associated with colonoscopy please ask your doctor for an information leaflet about that procedure.

## **What happens after FMT?**

If you are not an in-patient (staying on a ward) and do not have any other appointments on the day of your FMT, you can go home the same day. If the procedure is effective, the gut often takes a few days to begin to get better. You should notice that your stool frequency gradually reduces and that your stools are more formed (less runny). After a week you should be passing a nearly normal stool. Your doctor will arrange a follow up appointment to see you in clinic. In addition, he/she will also contact you 7 and 90 days after treatment to ask about your health, and side effects and how satisfied you were with the FMT. This information will be fed back, anonymously, to the University of Birmingham.

If the *Clostridium difficile* infection comes back, a further FMT treatment may be required to achieve a cure. This happens fewer than one in five times (below 20%).

## **Are there any alternatives?**

Your doctors will usually have already tried other treatments with different or longer courses of antibiotics, before considering FMT. You should always ask your doctors what other antibiotic treatments may be available to you.



## **Giving my consent for FMT**

We want to involve you in decisions about your care and treatment. If you decide to go ahead, you will be asked to sign a consent form. This states that you agreed to have the treatment and understand what it involves. You should only sign this form when you have had all your questions answered and are happy to proceed.

Where can I find more information?

If you would like any further information, please speak to one of the doctors looking after you.

## **Tell us what you think of this leaflet**

We hope that you found this leaflet helpful. If you would like to tell us what you think, please contact:

Dr Damian Mawer

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York Hospital

Wigginton Road

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Or Dr Prash Kant (at the same address).

## **Teaching, training and research**

Our Trust is committed to teaching, training and research to support the development of health and healthcare in our community. Healthcare students may observe consultations for this purpose. You can opt out if you do not want students to observe. We may also ask you if you would like to be involved in our research.

## **Patient Advice and Liaison Service (PALS)**

PALS offers impartial advice and assistance to patients, their relatives, friends and carers. We can listen to feedback (positive or negative), answer questions and help resolve any concerns about Trust services.

PALS can be contacted on 01904 726262, or email [pals@york.nhs.uk](mailto:pals@york.nhs.uk).

An answer phone is available out of hours.



# Leaflets in alternative languages or formats

Please telephone or email if you require this information in a different language or format, for example Braille, large print or audio.

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