

## **Clostridioides difficile (C. diff) – information for treatment with faecal microbiota transplantation (FMT)**

### **What is Clostridioides difficile?**

Clostridioides difficile, commonly known as C. diff, is a germ that is found in the gut of a small number of healthy people.

It is usually harmless but can multiply and cause an infection if other 'good' germs in the gut are harmed by medical treatments such as antibiotics or chemotherapy. These good germs can help protect against C. diff.

Specific antibiotics usually kill C. diff and cure people of the infection. However, in some people, diarrhoea caused by a C. diff infection can return.

### **What is faecal microbiota transplantation (FMT)?**

FMT involves transferring specially prepared faecal matter (poo) containing germs from the gut of a healthy adult into a person who has had repeated C. diff infections. The poo is mixed with a liquid to produce an FMT solution and then given to the patient through a nasogastric tube or colonoscopy (see page - relevant page numbers will be inserted once the digital design is complete).

FMT has been shown to restore a good balance of germs in the gut. It can be an effective treatment when repeated antibiotics have not worked.

### **Why should I have FMT?**

Patients who have another C. diff infection, even after antibiotic treatment, have a higher chance of becoming ill again. This is called recurrent infection. FMT is recommended when antibiotics have failed to cure the C. diff infection.

FMT has been shown to be effective in treating repeated C. diff infection, curing up to 9 out of 10 patients. Some patients (1 in 5) may need a second FMT treatment.

### **What are the risks of FMT?**

All FMT donors are screened to make as sure as possible that they, and their poo, are free from certain infections (including HIV, syphilis and viral hepatitis).

People with gastrointestinal disease, autoimmune disease or a history of cancer cannot be donors. The donor's identity is kept anonymous, and everything possible is done to reduce the risk of passing on infection or other conditions.

### **Giving your consent for FMT**

It is important that you are involved in decisions about your care and that you understand what the treatment involves.

Due to the risks (see page - relevant page numbers will be inserted once the digital design is complete), and because there is a small risk of infection being passed on through FMT, you will be asked for your consent for the procedure.

Your healthcare team cannot know about every germ in an FMT donor's poo, so there is a small chance of infection. If a healthcare professional is recommending FMT for you, it is because they feel that the risk from a C. diff infection is greater than the risks of FMT.

## **Preparing for FMT – what is involved and what do I need to do?**

FMT solution can be given through a nasogastric tube, which is a narrow tube that is placed through your nose into your stomach. It can also be given through a colonoscopy, where an endoscope (a long thin tube) is placed into your colon (part of the gut) through your bottom. The FMT solution is then put into your gut through the endoscope.

You will take antibiotics by mouth for at least four days beforehand, stopping the evening before the procedure. If you have a colonoscopy, you will be given a dose of medication to help the FMT solution stay in your body. Your healthcare professional will explain the medicines you will need to take.

Before the FMT, please also discuss any existing medication you are taking with your healthcare professional. You should be able to continue with your medications as normal unless the healthcare professional tells you otherwise.

Both procedures can be carried out in Wales. With either method, you should not be able to smell or taste the FMT solution. Your specialist will discuss with you the best procedure for you to have.

If the FMT solution is given by nasogastric tube, you will be given a tablet before the treatment to help reduce stomach acid (which could kill the healthy germs in the FMT). You will also be given a second tablet, to help your stomach empty into the next part of your gut.

The nasogastric tube will be put into your stomach on the day of the procedure and the FMT solution given through the tube. After the FMT solution is put in the gut, the nasogastric tube will be flushed with saline (a salt solution), left in place for a while and then removed.

If you have a colonoscopy, you will be given a liquid to drink beforehand to clear your gut of poo. You may have minor side effects, including a high temperature, bloating, feeling sick, vomiting and flatulence, for a few days after the procedure. Within 24 to 72 hours, if the FMT works, you should be going to the toilet less often and your poo should gradually get firmer.

All medical procedures come with some risk. If a nasogastric tube is used in the procedure, there is a risk the FMT solution can get into the lungs. This is very unlikely, and specialists will monitor the transplant carefully to minimise the risk. Medications are given with the FMT solution to make this much less likely.

A colonoscopy may cause bleeding or tearing of the lining of the gut wall. If the gut wall is torn during FMT, you may need a blood transfusion or surgery to treat the problem.

You can get more information from a healthcare professional or by visiting [www.nhs.uk/conditions/colonoscopy/](http://www.nhs.uk/conditions/colonoscopy/).

## **What will happen after FMT?**

If you are not an inpatient, you will be able to go home after the procedure and should be able to eat and drink within an hour of the treatment. If the FMT is effective, the gut usually takes a few days to get better. Your poo should become less runny and you should go to the toilet less often. After a week, your poo should be nearly normal.

Your specialist will want to speak to you again to check the treatment has been successful. If you are a hospital patient, when you leave you will be given a date for a follow-up appointment and told whether you will need to provide further poo samples. FMT is a relatively new treatment, so it is important that information about success rates and any side effects, for example gut pain and bleeding, is collected.

As well as a routine follow-up after seven days, or when you are discharged from hospital (whichever happens earliest), your specialist will fill in a questionnaire about your progress 90 days after your FMT treatment. They will ask you questions about your health, any side effects you have had and how satisfied you were with the treatment. Your healthcare team will collect this information and send it to where the FMT solution was produced. Information about the outcome of your treatment will be kept anonymous.

**Who can I contact if I have any questions?**

Please speak to your healthcare professional if you have any further questions.