

Faecal microbiota (stool) transplantation (FMT)

This leaflet explains more about faecal microbiota transplantation, including the benefits, risks and any alternatives and what you can expect when you come to hospital.

If you have any further questions, please speak to a doctor or nurse caring for you.

What is faecal microbiota transplantation?

Faecal microbiota transplantation (also called FMT or stool transplantation) is a treatment that is used when standard therapies fail to help with diarrhoea caused by **Clostridium difficile** (a type of bacteria). The treatment involves the transfer (through a processed mixture of liquid stool) of healthy bacteria from a donor into the intestines of the patient (recipient). The idea is to restore the balance of bacteria in the recipient's intestine so that he or she can fight infection.

Donors can be family members or others who are known and identified by you, but must:

- be tested for a wide array of bacterial and parasitic infections
- be free of health problems
- be lead a healthy lifestyle.

As it is not easy to find a suitable and/or willing donor, sometimes 'banked' stool (faeces or 'poo') from anonymous donors can be used. These donors have been screened and tested in the same way.

Why should I have FMT?

Clostridium difficile infection can often return following apparently successful treatment. After one episode of *Clostridium difficile* infection, there is a one in four or one in five (20–25%) chance that it will come back. Patients who have had it more than once are at even greater risk of recurrence.

Treating recurrent episodes of *Clostridium difficile* can be difficult, as the standard antibiotic therapy becomes less effective. Your doctors may try longer courses or different types of antibiotics or other medications, however, in a small number of cases this is not successful and your doctor may recommend FMT.

What are the risks?

To date, there have not been any documented cases of infection transmitted through FMT. However, stool is considered to be a bodily fluid, so it is essential that thorough donor screening and testing is carried out. Donors complete a screening questionnaire similar to those used at blood banks and for organ or tissue transplants. Prospective donors with risk factors for HIV and viral hepatitis are excluded from donating. Those with significant gastrointestinal or autoimmune disease, or with a history of cancer are not acceptable donors.

Donors who meet the criteria undergo blood testing for a range of infectious diseases, including HIV, hepatitis A, B and C, and syphilis. They are also asked to submit a stool sample to be tested for bacteria (such as Salmonella and Campylobacter), parasites, and Clostridium difficile.

You will be asked to sign a consent form acknowledging the risks of undergoing a colonoscopy as well as theoretical risks related to the faecal transplant itself (infection, allergic or immune reaction, or other disease transmissions). If you would like more detailed information on colonoscopy, please ask your nurse or doctor for a copy of our leaflet, **Having a colonoscopy – an examination of your large bowel**.

Serious complications are extremely rare. The most serious risk is of the endoscope damaging your colon during the procedure. This is rare, occurring in less than one in 1000 procedures, but can cause an infection, bleeding or a perforation (tear) of the lining of the bowel. If a perforation occurs, you may require surgery to treat the problem.

Your doctor will discuss these potential risks with you in more detail. Please ask questions if you are uncertain.

Are there any alternatives?

Your doctors will already have tried different types or longer courses of antibiotics. This treatment is only available to patients where these standard therapies have been tried and not worked.

How can I prepare for FMT?

You will be asked to take an antibiotic (vancomycin) for at least four days prior to the transplant. This should be stopped the evening before the procedure. You will also be asked to take a laxative (medicine that speeds bowel movement) beforehand. You will need to drink more fluids on the day before the procedure. You should aim to drink a glass of water every hour. Full details will be given to you by your doctor.

You should have had the chance to discuss any medications you are taking with one of our nurses or doctors before your procedure. If you are taking antiplatelet medicines or anticoagulants (such as aspirin or clopidogrel, warfarin, rivaroxiban or dabigatran) to prevent the formation of blood clots, sedatives, chronic pain medication, or medicines for diabetes, please let the doctor or nurse know in good time before the date of your procedure.

You should be able to take all of your medications as normal, unless you have been told otherwise by the doctor or endoscopy nurse.

Giving my consent (permission)

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 agree to have the treatment and you understand what it involves.

You should receive the leaflet, **Helping you decide: our consent policy**, which gives you more information. If you do not, please ask a member of staff caring for you for a copy.

What will happen on the day of the procedure?

The procedure is performed either as an inpatient or as a day case, and will be performed on the endoscopy unit. When you arrive at the endoscopy unit, please give your name to the receptionist or nurse. You will be asked to sit in the waiting area before being seen by an

endoscopy nurse, who will ask you about your medical history. Please tell the nurse if you have had any reactions or allergies to other examinations in the past.

You will be asked to remove all of your clothing and change into a gown. You may want to bring your dressing gown and slippers with you. Once you are ready, you will be taken to the second waiting area, signposted 'sub wait area'. Your doctor will explain more about the procedure and will answer any questions you may have.

The procedure is normally performed with sedation or an injection of painkillers but you can choose not to have sedation if you wish. Sedation is medication that makes you sleepy but does not put you to sleep. Your doctor will explain this to you in more detail.

As an alternative to sedation you may wish to consider using Entonox® for pain relief. You may already know that Entonox® is used to relieve pain during childbirth. It is also widely used by the ambulance service and in hospitals for a variety of procedures and conditions. Please ask the doctor or nurse for a copy of our leaflet, **Use of Entonox® for your endoscopic procedure**.

The procedure itself takes 30–40 minutes and an endoscopy nurse will be present throughout for reassurance.

You will be asked to lie down on your left-hand side on a couch with your knees bent. The endoscope will then be inserted into your lower bowel through your anus. The transplant liquid will be passed down a channel in the endoscope at several points. This may make you feel slightly bloated and you may feel the urge to go to the toilet or pass wind. This is perfectly normal and is nothing to be embarrassed about.

Will I feel any pain?

You should not feel pain during the procedure, although you may have brief periods of discomfort, particularly when the endoscope is first inserted and when the scope passes around bends in your bowel. Occasionally the doctor or nurse will press gently on your stomach or your position may be altered to aid the passage of the scope.

What happens after the procedure?

After the procedure you will be taken to the recovery area. If you have had sedation, you will need to rest quietly until the sedative has worn off (usually a couple of hours). The nurse will check your blood pressure and pulse and offer you some tea and biscuits.

If you have not had sedation you will be taken to the discharge area and you will be able to leave the hospital straight afterwards.

Following the procedure you are very likely to have loose bowel motions and feel a little bloated – this is normal. 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. During this time you may have some stomach cramps and/or feel nauseous.

If you are not an inpatient (staying on a ward) and do not have any other appointments on the day of your FMT, you can go home the same day. However, we do recommend that you wait until after you have opened your bowels.

Aproximately one in five patients (20%) will have a relapse after their first faecal transplant and will need to have a second faecal transplant. The overall success rate for patients having one or two faecal transplants is 94%.

If you have sedation, you must have someone to escort you home and stay with you for 24 hours. He/she should come with you to your appointment or be contactable by phone when you are ready to leave. If you do not have an escort or have not arranged for someone to collect you, your procedure will be cancelled. If you are unable to arrange for someone to collect you, please contact us to discuss alternative arrangements.

Even though you may feel well, the sedation lasts longer than you may think, so in the first 24 hours after the procedure, you should not:

- drive or ride a bicycle
- operate machinery or do anything requiring skill or judgement
- drink alcohol
- take sleeping tablets
- go to work
- make any important decisions, such as signing contracts or legal documents.

You should rest at home following your procedure. You can eat and drink normally and should be able to carry out your normal activities 24 hours after the procedure.

What do I need to do after I go home?

Please consult your GP or go to your nearest A&E department if you develop severe abdominal pain, a fever or pass large amounts of blood after the procedure.

Will I have a follow-up appointment?

You will be offered a follow-up appointment to asses whether or not the treatment has been successful – you may be asked to provide further stool samples. Details will be given to you on the day of your procedure.

Appointments at King's

We have teamed up with King's College Hospital in a partnership known as King's Health Partners Academic Health Sciences Centre. We are working together to give our patients the best possible care, so you might find we invite you for appointments at King's. To make sure everyone you meet always has the most up-to-date information about your health, we may share information about you between the hospitals.

Contact us

If you have any questions or concerns about faecal microbiota transplantation (FMT), please contact Dr Simon Goldenberg on **020 7188 8515** (Monday to Friday, 9am to 5pm).

For all other problems or concerns, please contact the **endoscopy unit** for advice on **020 7188 7188 ext 54059** (Monday to Friday, 9am to 5pm).

If you need to change or cancel your appointment, please let us know by calling **0207 188 8887**.

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit www.guysandstthomas.nhs.uk/leaflets

Useful sources of information

Pharmacy Medicines Helpline

If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline.

t: 020 7188 8748 9am to 5pm, Monday to Friday

Patient Advice and Liaison Service (PALS)

To make comments or raise concerns about the Trust's services, please contact PALS. Ask a member of staff to direct you to the PALS office or:

e: 020 7188 8801 at St Thomas' **t:** 020 7188 8803 at Guy's **e:** pals@gstt.nhs.uk

Language Support Services

If you need an interpreter or information about your care in a different language or format, please get in touch using the following contact details.

t: 020 7188 8815 **fax:** 020 7188 5953

NHS 111

Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day.

t: 111

NHS Choices

Provides online information and guidance on all aspects of health and healthcare, to help you make choices about your health.

w: www.nhs.uk

Become a member of your local hospitals, and help shape our future

Membership is free and it is completely up to you how much you get involved. To become a member of our Foundation Trust, you need to be 18 years of age or over, live in Lambeth, Southwark, Lewisham, Wandsworth or Westminster or have been a patient at either hospital in the last five years. To join:

t: 0848 143 4017 **e:** members@gstt.nhs.uk **w:** www.guysandstthomas.nhs.uk