# Faecal microbiota transplantation

# - what is it and why do we do it?

# What is Faecal Microbiota Transplantation (FMT)?

FMT is a procedure by which we try to transfer the entire bacterial flora from the gut of a healthy donor animal to an animal that suffers from chronic GI disease like Inflammatory Bowel Disease (IBD). This type of procedure has been anecdotally successful in cases of IBD that do not respond to routine treatments. Dogs and cats frequently suffer from IBD, and the diagnosis should be clearly made (exclusion of all other potential causes) and the animal should have received standard treatment (diet, antibiotics, anti-inflammatories/ immunosuppressants) before considering FMT. FMT is also done in people that suffer from "bacterial overgrowth" of their gut.

There are currently no large studies available that assess the effect of FMT in dogs or cats with IBD, which is why we are conducing one currently to look at the success rate of this treatment. Please see the information sheet for this study on our website for more information!

# Why is it done in dogs and cats?

Inflammatory Bowel Disease (IBD) is believed to be an intolerance of the body towards the normal bacterial "gut flora", leading to chronic inflammation that shows in chronic vomiting, diarrhoea and weight loss. Some dogs and cats with IBD improve with dietary changes alone, but some require antibiotics or immunosuppressive drugs. We believe that for example antibiotic treatment works in this condition because it changes the "gut flora" to make it more tolerable for the body. Hence, if long-term administration of antibiotics "works" for a patient but is problematic for another reason, FMT might be good treatment alterative. Equally, in patients that have severe side effects from other treatments for IBD or that do not respond at all, FMT can be considered as an alternative or "salvage" procedure.

# How is it done at the Hospital for Small Animals in Edinburgh?

We perform FMT as part of a study currently, so your dog or cat will have been seen for a normal appointment first to assess if they are eligible for the trial and to also explain the details of the produre. After that, we will make another out-patient appointment and administer the FMT as an enema. In dogs, this can mostly be done conscious, or some might require mild sedation. Cats are currently not part of the clinical study, but in certain individual cases we might be able to offer FMT as well. However, in cats, this needs to be done as an enema under general anaesthetic. This is not only because cats are less likely to tolerate an enema awake compared to dogs, but also because they have a shorter gut and we need to protect their airways from the risk of aspirating any stomach content when giving an enema.

# Is FMT safe?

We test our FMT donors for intestinal parasites and other infections before the procedure. However, as we cannot possibly test for all potential (and very rare diseases) and we cannot characterise all bacteria in much detail, we cannot rule out a very small risk of transferring an infectious disease.

# How long does the effect of FMT last?

This is currently unknown, as no large data sets from any studies are available looking at this. This is why we not only perform this procedure and look at the clinical outcome but also compare the composition of the gut flora before and at certain time points after the procedure. We hope that this will help guide future treatment decisions and also to give an idea on how long the changes of the microflora might last after an FMT procedure.

Please do not hesitate to ask your veterinarian to contact us with any queries regarding this procedure and to assess if your pet might be benefiting from it.

# The DIGEST clinic team

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