

What is chronic diarrhoea?

Diarrhoea can be acute (over a short time span) or chronic (occurring over a longer time span i.e. several weeks to potentially years).

Diarrhoea occurs when there is too much water in the stools. This can be due to disease in the small intestine or the large intestine. It is important that you notice the characteristics of the diarrhoea (i.e., frequency of defecation, percent of stools that are normal/abnormal, the presence or absence of mucus in the stool, blood in the stool, straining to defecate) as well as any weight changes because these facts can help the clinician know which portion of the intestine is affected.

What can cause chronic diarrhoea?

Chronic diarrhoea can be caused by several medical problems. The list below shows some of the common causes of chronic diarrhoea. Please note this is not a comprehensive list and the diagnosis depends on the individual patient.

Causes of chronic diarrhoea can include:

- *Diseases not related to the intestines:*
 - Hormonal problems: e.g. Addison's disease (low steroid content in the body) or hyperthyroidism (high thyroid levels)
 - Liver disease
 - Kidney disease
 - Pancreatitis
 - Cancers of other organs
- *Diseases linked to the intestines:*
 - Foreign body
 - Infectious diseases: e.g. parasites, bacterial infection
 - Inflammatory diseases: e.g. dietary allergy, dietary intolerance, inflammatory bowel disease
 - Cancer

What investigations are likely to be performed at USVC?

Blood tests

We may take a blood sample to assess for possible causes of diarrhoea and to determine the severity of the underlying disease. These blood tests may include but are not limited to tests for Addison's, assessment of kidney and liver parameters alongside red and white blood cell counts. We may also check your pet's vitamin B12 levels as this can be low in pets with chronic diarrhoea and may need to be supplemented.

Imaging (ultrasound, x-ray, or computed tomography)

Imaging will most likely be performed to assess the gastrointestinal tract and to look for other potential causes of diarrhoea. The imaging modality chosen will depend on what is deemed the most suitable option for your pet.

- **Stool analysis**

The stool can be analysed to look for parasites and bacteria.

- **Endoscopy**

Endoscopy (a flexible tube with a camera on the end) may be performed to assess the appearance of the mucosa (lining of the gut) and acquire non-invasive biopsies via forceps (small pinch biopsies). This may be an "upper" or "lower" endoscopy, and this depends on your pet's history. An "upper" endoscopy refers to endoscopy of the stomach and small intestine whereas a "lower" endoscopy refers to endoscopy predominantly of the large intestine. Your pet will need to be prepared (typically drink a preparation fluid to clean the gut or require an enema) for endoscopy and this typically requires hospitalisation before the procedure at Wear Referrals. Endoscopy will be carried out under a general anaesthetic. Most dogs tolerate endoscopy well but may be unsettled for a couple of days following the procedure. Your pet is likely to be hospitalised the evening after the procedure.

- **Biopsy**

Biopsies of the intestines may be performed to help obtain a diagnosis. Biopsy can be performed via endoscopy or surgery. The biopsy samples are submitted to an external, specialised veterinary laboratory to assess for inflammation, infection, and cancer cells typically. The submitted samples typically take ~10-14 days to return and then the results need to be interpreted by the consultant in context with your pet's history.

What treatment options are available for my pet?

Treatment options will vary widely dependent on the underlying cause. For example, if your pet has an underlying dietary allergy or liver disease the treatment is different. Treatment will be specifically tailored by your consultant at Wear Referrals so that your pet receives the best care. The treatments below are generally recommended in patients with gastrointestinal disease.

Some possible treatments below may be discussed with you for your pet:

Worming

Repeat worming treatment may be indicated if the results are suggestive of possible infection or if worming treatment is due.

Diet trial

If your pet is suspected to have an inflammatory disease of the intestines (dietary allergy/intolerance or inflammatory bowel disease) then a specific diet may be recommended. The reason for this is that, in some cases, your pet's immune system is overactive in response to food that would be considered "normal" for other healthy pets. Animal proteins in foods in the diet are the most common source of allergies more so than grains. Unfortunately, there are no reliable ways to test your pet for food allergies. Blood tests are not sensitive enough to reliably tell you the source of the allergy and thus which diet is best for your pet. The only way to determine which foods your dog is allergic to is through the process of elimination. **During this elimination trial, it's extremely important to only feed your dog the prescribed food.** The most frequently mentioned reason for failure in test diets is by feeding your pet other food alongside the diet. To put it in perspective, a person that has a nut allergy cannot have even

a single peanut. To fully determine the cause of food allergies, you must be as strict as possible, and that includes everyone else in your household too. To see if your pet is responding to a diet, the diet

must be fed for 1-3 months. We may recommend a novel protein or hydrolyzed diet. Hydrolyzed, meaning that they go through a process of breaking down proteins on a molecular level so that they are too small for the dog's body to recognize them as allergens but they still get the nutritional benefit.

It is extremely hard to compose a complete home cooked hypoallergenic diet due to the complex nutritional needs of your pet therefore these are generally not recommended for this reason. If a home cooked diet is needed, consultation with a veterinary nutritional specialist is vital which we can organise for you.

If your pet responds to the diet then lifelong feeding of the diet may be needed to reduce the likelihood of illness recurring and limit the amount of additional medication your pet will need. There are many different diets available in addition to hydrolysed diets and the specific diet will be selected based on your pet's needs.

Immunosuppressive medications

We may recommend medication to dampen your pet's immune response if an inflammatory disease is suspected. Some pets may require lifelong medication or a combination of medications to make them feel better. One of the most used immunosuppressive medications is steroids. Side effects of steroids can include increased thirst and urination, panting, weight gain and a poor coat quality. We typically taper the dose of medications gradually over time if possible, to limit side effects.

Antibiotic therapy

If we suspect your dog has an infection or an antibiotic responsive diarrhoea this may be advised. Antibiotics may help to also dampen the immune response in the body in addition to treating bacterial infections.

Additional supportive therapy

Probiotics or medications to help firm the stool such as binding pastes may be prescribed if deemed suitable. Additional supportive medications will depend on the underlying diagnosis and needs of your pet.

Supportive therapy in hospital

Your pet may need to be hospitalised if they are poorly. This allows us to provide vital care for example fluid therapy if they are dehydrated. If your pet has an intravenous catheter in place it also allows us to give intravenous medications that are absorbed quickly. If your pet has not been eating a feeding tube may be recommended to provide nutritional support while your pet is poorly. A feeding tube can be placed via the nose (nasal tube), oesophagus or stomach (via endoscopy or surgery).

USVC is staffed 24 hours with veterinary surgeons and nurses to provide your pet with the best possible care.