



This case report demonstrates the successful use of the probiotic supplement Canine FortiFlora® in the management of canine chronic colitis.

Benefits of FortiFlora® in the successful management of canine chronic colitis



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Chronic colitis is frequently diagnosed in veterinary practice and is one of the most common causes of chronic diarrhoea in dogs. Even though it is not life threatening, it is nevertheless very uncomfortable for the patient and inconvenient for the dog's owners. The term chronic colitis encompasses several conditions, all of which have inflammation of the colon as their predominant pathology.

Causes of chronic colitis include parasitic, infectious, immune-mediated or primary inflammatory conditions. Regardless of aetiology, the clinical signs of chronic colitis are similar and easy to recognise - an increased frequency of defecation (which is often associated with tenesmus) and poorly formed stools, often containing mucus and fresh blood. Treatment options for patients with colitis include standard supportive treatments to restore fluid balance, antibiotics, anti-diarrhoeal or antispasmodic medications during acute episodes, non-steroidal anti-inflammatories such as Salazopyrin®, (sulphasalazine) and corticosteroids¹. Dietary change is also highly recommended to provide adequate dietary fibre and high digestibility to limit the passage of ingesta into the colon. Probiotics are also often recommended on account of their immunomodulatory effect and positive influence on intestinal microfloral balance and stability.

Case History



Belue, a six year-old spayed female German Shepherd Dog was referred for a nutrition consultation at the Nantes National Veterinary College. Belue had been having episodes of chronic diarrhoea for the past three years. The owners reported that her stools varied on a daily basis from liquid to soft to barely formed (faecal score of 6 or 7 on a seven point scale

- where 7 is very liquid diarrhoea). Belue was receiving a good quality, dry, adult commercial dog food. She was up-to-date with worming and vaccinations. Belue had received antibiotics (metronidazole) and intestinal mucosal protectants several times without any improvement.

Clinical Examination

Clinical examination revealed no significant abnormalities. Belue weighed 28 kg and was in ideal body condition (body condition score 5/9). Complete haematology profile and biochemistry analysis were performed. Additionally, TLI (Trypsin-like immunoreactivity), folate and vitamin B12 levels were assayed. Urinalysis and abdominal ultrasound were also performed. The only significant findings were an elevated serum folate (16.5 mg/l, while normal values should be < 12 µg/L) and hypovitaminosis B12 (223 ng/l, while normal range is 350 to 850 ng/L).

Treatment

A dietary treatment protocol based on probiotics and a high quality diet was recommended. Belue was changed onto a high quality adult dog food (PURINA® PRO PLAN® Dog) and a daily sachet of FortiFlora® was prescribed. This was continued for nine weeks. There was no recurrence of diarrhoea during treatment and she maintained a good faecal score (3/7) throughout this period.

Follow-up

Belue has had two follow-up consultations at which her general condition was good and clinical improvement was excellent. Repeat serum biochemistry confirmed that blood levels of vitamin B12 had normalised but hyperfolataemia persisted. Hyperfolataemia is not a specific finding because it can be related to either an increased concentration of folate in the diet² or production of folic acid by intestinal bacteria (most likely in this case)³. Without any pathological or clinical signs, the hyperfolataemia in this case could not be interpreted.


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About the Probiotics

Probiotics are able to both modify the intestinal microflora and enhance the innate immune responses. They are able to:

- Influence the composition of the intestinal flora when they are present in sufficient quantities (more than 1×10^8 CFU/g) and to promote the growth of 'good' bacteria
- Modify the mucus layer in the intestines strengthening the integrity of the intestinal barrier
- Stimulate the synthesis of bactericidal substances (such as defensins) by the mucosal cells, contributing to the fight against pathogens

The main indications for probiotics include⁴:

- Acute or chronic diarrhoea, because they inhibit the growth of pathogenic bacteria such as coliforms or salmonellae
- Chronic inflammatory conditions of the intestines, on account of their immunomodulatory action
- Food allergies or vaccination due to their ability to help strengthen the immune barrier⁵

In chronic colitis, probiotics help optimise the balance of the intestinal bacterial flora and also have a local immunomodulatory and anti-inflammatory action. It is important to choose probiotics which are appropriate to the species concerned, ensuring a large quantity of living microorganisms reach the area to be treated⁶. In the case presented here, the probiotic supplement (Canine FortiFlora®) sprinkled on the food was well accepted because it is highly palatable. In chronic conditions, long-term treatment is recommended to sustain beneficial adaptations of the intestinal microflora. FortiFlora® probiotics are both safe and locally efficacious.

The prognosis for chronic colitis is generally good as long as systemic health is unaffected. However, elimination of bouts of diarrhoea should be sought in order to restore the dog's digestive well-being and improve quality of life for both dog and owner. In the long term, chronic colonic diarrhoea can lead to electrolyte imbalance and prevent absorption of vitamins synthesised by resident bacteria.

In cases of proven bacterial proliferation or recurrent chronic colitis despite conventional treatment, the use of probiotics is strongly recommended. Whilst the mainstay of therapy for chronic colitis remains the use of a highly digestible diet rich in fibre, probiotics should now also become an important part of a practitioner's therapeutic arsenal to manage this common condition.

Further Reading

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