

Colitis and Proctitis

(Inflammation of the Colon and Rectum)

Basics

OVERVIEW

- “Colitis” is inflammation of the colon
- “Proctitis” is inflammation of the rectum

GENETICS

- Breed susceptibility to histiocytic ulcerative (granulomatous) colitis in boxers, French bulldogs, and perhaps Border collies; histiocytic ulcerative colitis is inflammation characterized by a thickened lining of the colon with varying degrees of loss of the superficial lining (known as “ulceration”); the thickening is due to infiltration of various cells (histiocytes, plasma cells, and lymphocytes) in the layers under the lining
- Association between inflammation of the colon (colitis) and one or multiple draining tracts around the anus (known as “perianal fistulas”) in German shepherd dogs

SIGNALMENT/DESCRIPTION OF PET

Species

- Dogs
- Cats

Breed Predispositions

- Boxers—histiocytic ulcerative colitis; histiocytic ulcerative colitis is inflammation characterized by a thickened lining of the colon with varying degrees of loss of the superficial lining (known as “ulceration”); the thickening is due to infiltration of various cells (histiocytes, plasma cells, and lymphocytes) in the layers under the lining
- German shepherd dogs—possible association between inflammation of the colon (colitis) and one or multiple draining tracts around the anus (perianal fistulas)

Mean Age and Range

- Any age
- French bulldogs usually have clinical signs by 2 years of age

SIGNS/OBSERVED CHANGES IN THE PET

- Feces vary from semiformed to liquid
- High frequency of defecation (6-15 times/day), with small volume of stool
- Pets often demonstrate prolonged straining (known as “tenesmus”) after defecation
- Long-term (chronic) diarrhea often with mucus and/or blood; cats may have formed feces with blood (known as “hematochezia”)
- Occasionally pain when defecating (known as “dyschezia”)
- Vomiting in approximately 30% of affected dogs



- Weight loss—uncommon
- Physical examination usually normal; dogs with histiocytic ulcerative colitis may show signs of weight loss and lack of appetite (known as “anorexia”); rectal exam may reveal thickened and irregular areas of the lining of the colon and rectum

CAUSES

- Food-responsive—Dietary indiscretion—the pet eats inappropriate things (such as garbage); Food intolerance—the pet eats something to which it is sensitive or something it cannot tolerate
- Medications—antibiotics, nonsteroidal anti-inflammatory drugs (NSAIDs)
- Infectious—parasites (such as whipworms [*Trichuris vulpis*], *Entamoeba histolytica*, *Balantidium coli*, *Tritrichomonas foetus*), bacteria (such as *Clostridium difficile*, *Salmonella*, *Clostridium perfringens*, *Campylobacter jejuni*, *Yersinia enterocolitica*, *Escherichia coli*), algae (*Prototheca*), fungus (*Histoplasma capsulatum*), and pythiosis/phycomycosis
- Trauma—foreign body, abrasive material
- Inflammatory—transverse colitis secondary to inflammation of the pancreas (known as “pancreatitis”)
- Inflammatory/immune disorders—Inflammatory bowel disease (IBD) characterized by the type of cells found in the inflamed colon, such as lymphoplasmacytic, eosinophilic, granulomatous

Treatment

HEALTH CARE

- Outpatient medical management, unless diarrhea is severe enough to cause dehydration
- Balanced electrolyte fluids for dehydrated pets

DIET

- There is no benefit to fasting patients with diarrhea unless the diarrhea is caused by something pulling water into the gut (known as “osmotic”)
- Try a hypoallergenic or novel protein diet (a protein to which the pet has never been exposed) for 2 weeks in pets with inflammatory colitis; use a commercial or home-prepared diet that contains a protein to which the dog or cat has not been exposed, response is expected in about 5-7 days following diet change
- Fiber supplementation with poorly fermented fiber (such as bran and alpha-cellulose) is recommended to increase fecal bulk, improve colonic muscle contractility, and bind fecal water to produce formed feces
- Some fermentable fiber (such as psyllium or a diet containing beet pulp or fructooligosaccharides) may be beneficial—short-chain fatty acids produced by fermentation may help the colon cells heal

SURGERY

- Segments of colon severely affected by scar tissue (known as “fibrosis”) from long-term (chronic) inflammation and subsequent narrowing (known as “stricture formation”) may need surgical removal; folding of one segment of the intestine into another segment (known as “intussusception”) requires surgical intervention; inflammation secondary to the water mold, *Pythium* (disease known as “pythiosis”) or to a particular fungal infection (known as “phycomycosis”) often requires surgical removal or debulking

Medications

Medications presented in this section are intended to provide general information about possible treatment. The treatment for a particular condition may evolve as medical advances are made; therefore, the medications should not be considered as all inclusive

ANTIPARASITIC OR ANTIMICROBIAL DRUGS

- Whipworms (*Trichuris*)—fenbendazole (with repeat treatment in 3 months)
- *Entamoeba*, *Balantidium*—metronidazole
- *Tritrichomonas foetus*—ronidazole
- *Salmonella*—treatment is controversial because a carrier state can be induced; in pets with generalized

(systemic) disease involvement, choose the antibiotic on the basis of bacterial culture and sensitivity testing (antibiotic examples include enrofloxacin, chloramphenicol, or trimethoprim-sulfa)

- *Clostridium*—metronidazole or tylosin
- *Campylobacter*—erythromycin or azithromycin
- *Yersinia*—choose the drug on the basis of bacterial culture and sensitivity testing
- *Prototheca*—no known treatment
- *Histoplasma*—itraconazole; amphotericin B in advanced cases
- Pythiosis—itraconazole and terbinafine (following surgical treatment of affected portions of the bowel)

ANTI-INFLAMMATORY AND IMMUNOSUPPRESSIVE DRUGS FOR INFLAMMATORY/IMMUNE COLITIS

- Sulfasalazine; long-term use may be needed; for mild cases
- Steroids—prednisone (dog), prednisolone (cat) with tapering dosage as directed by your pet's veterinarian, once clinical remission is achieved
- Azathioprine—(a chemotherapy drug) used to decrease the immune response (dogs only)
- Chlorambucil (a chemotherapy drug) used to modulate the immune response in cats and dogs, often with prednisone/prednisolone
- Cyclosporine—to decrease the immune response
- Histiocytic ulcerative (granulomatous) colitis in dogs—enrofloxacin

MOTILITY MODIFIERS (SYMPTOMATIC RELIEF ONLY)

- Loperamide
- Diphenoxylate
- Propantheline bromide, if colonic spasm is contributing to clinical signs

ANTHELMINTICS

- Fenbendazole

Follow-Up Care

PATIENT MONITORING

- Recheck examinations or veterinarian communication by phone
- Monitor pets on sulfasalazine for signs of dry eye (known as “keratoconjunctivitis sicca” or KCS)
- Monitor pets on azathioprine for bone-marrow suppression—complete blood count (CBC)

PREVENTIONS AND AVOIDANCE

- Avoid exposure to infectious agents (such as exposure to other dogs, contaminated foods, moist environments)
- Avoid sudden changes in diet

POSSIBLE COMPLICATIONS

- Recurrence of signs without treatment, when treatment is tapered, and with progression of disease
- Narrowing of the colon or rectum (stricture formation) due to long-term (chronic) inflammation

EXPECTED COURSE AND PROGNOSIS

- Most infections causes—excellent with treatment
- Infection with *Prototheca* (type of algae)—grave; no known treatment except surgical removal of diseased tissue
- Infection with *Histoplasma* (type of fungus)—poor in advanced or widespread (disseminated) disease; mild to moderate cases generally respond to therapy
- Pythiosis/phycomycosis—poor long-term prognosis despite surgical removal of affected tissue
- Cecal inversion, ileoceocolic intussusception—good with surgical removal

- Inflammatory—fair to good with treatment in pets with lymphoplasmacytic, eosinophilic, and granulomatous colitis
- Most dogs with mild to moderate nonspecific colitis respond favorably to a combination of fenbendazole, hypoallergenic diet and tylosin antibiotic therapy

Key Points

- Treatment may be intermittent and long-term in pets with inflammatory/immune colitis, and cyclic recurrence is seen in some cases
- Some types of colitis respond poorly to medical treatment; surgery may be necessary