

## Colitis

### What is colitis?

Colitis is inflammation of the colon. The colon is also called the large bowel or large intestine. The large bowel together with the small bowel comprises the entire intestinal tract. The major job of the small bowel is to facilitate digestion and absorption, while the major function of the large bowel is to allow for the absorption of water, act as a storage receptacle, and produce small amounts of mucus.

### What causes colitis?

There are many possible causes of colitis. In most cases, colitis is due to primary disease of the large bowel, but in some cases, it may be secondary to disease in another organ system. Colitis may also differ in cause depending on species (for example, cats sometimes have different causes of colitis than dogs), and can be due to more than one cause. Some of the more common causes of colitis include food allergies, dietary indiscretion, inflammatory bowel disease (a condition caused by the excessive infiltration of inflammatory cells into the normal lining layers of the intestinal tract), fiber responsive colitis, intestinal parasites, infectious agents (bacterial, mycobacterial, fungal, protozoal), tumor infiltration, anatomical abnormalities, and psychological stresses (a situation where intermittent bouts of diarrhea are linked to emotional stressful episodes in the pet's life).

### What are common clinical signs?

Clinical signs of colitis are somewhat variable and may be different in each patient. Some patients will also have involvement of the small bowel (as some diseases effect both portions of the intestinal tract). If disease extends to involve the small bowel, weight loss, poor appetite and increased volumes of stool may be evident. If the disease process is limited to the large bowel (eg, colitis), then some of the more common clinical signs include increased frequency of defecation, straining to defecate, fresh blood in the stool, mucus in the stool, flatulence, and occasional vomiting.

### How is colitis diagnosed?

A step-wise approach is often used in the diagnostic work-up of the patient with clinical signs of large bowel diarrhea (colitis). Depending on the severity of the clinical signs, rate of disease progression, and findings noted on history and physical exam, testing may proceed in a slower or more rapid format. In most cases, preliminary or initial tests include a minimum data base (CBC, biochemistry profile, urinalysis, and fecal tests). After reviewing the results, additional diagnostic/and or therapeutic trials are pursued. Additional diagnostic tests that may be indicated include abdominal radiographs, abdominal ultrasound exam, and other specialized blood or fecal tests. Dietary and/or therapeutic trials are also very important (as in some cases, the cause of colitis can only be diagnosed by such therapeutic trials). In patients with chronic colitis, those with more severe forms of the disease, those that have concurrent signs of small bowel disease, or those in which a diagnosis is not evident from preliminary diagnostics, there is another procedure that can be very helpful in obtaining a diagnosis. This diagnostic procedure is called colonoscopy, a technique whereby a long flexible tube containing a camera on the end is gently introduced through the rectum and then advanced into the colon. Biopsy samples of the colon can also be obtained by passing a special instrument through a channel in the endoscope (tissue samples are obtained from the "inside surface" of the intestinal tract under direct visualization). Colonoscopy and biopsy is necessary in some patients with colitis in order to be able to make a definitive diagnosis. Colonoscopy requires general anesthesia as well as hospitalization beforehand for special preparation (the patient must be fasted and given enemas prior to the procedure).

### **How is colitis treated?**

The answer to this question depends in large part on what has caused the colitis, what part(s) of the intestinal tract are affected (just large bowel or small bowel as well), what clinical signs are present, the severity of disease (based on clinical signs as well as lab work), and the results of colonoscopy and tissue biopsy samples. In general, some of the more common therapeutic approaches that may be helpful include anthelmintic (deworming) medications to rule out intestinal parasites, fiber supplements, dietary alterations (which may include the use of an hypoallergenic diet, a highly digestible diet, or a high fiber diet), probiotic therapy, antibiotic therapy, antiprotozoal therapy, anti-inflammatory therapy, immunosuppressive therapy (with medications such as prednisone, imuran and others), or behavioral modification and therapy (if due to stress colitis). Each patient represents a unique challenge when it comes to diagnosis and therapeutic management, and patience is often required to determine the best therapeutic course that is effective in each case.