

## Inflammatory Stomatitis

Inflammatory bowel disease (IBD) is a term used to describe a group of intestinal disorders characterized by infiltration of the wall of the intestinal tract with many cells. Literally, the wall of the intestine becomes lined with cells unable to perform the normal intestinal functions of digestion and absorption of nutrients.

### Cause

There are a variety of potential causes of inflammatory bowel disease. Occasionally the normal bacteria that inhabit the intestinal tract can become unbalanced and there may be an overgrowth of one bacterial type. This overgrowth irritates the intestinal tract. Certain parasites, bacteria, or viruses can enter the intestinal tract and cause direct irritation. Some pets are sensitive to certain types of protein or additives in food.

Certain animals appear to have a genetic predisposition to chronic, unexplained inflammation of the intestinal tract. This type of inflammation is due to an aberrant immune response. The immune system has both pro-inflammatory and anti-inflammatory chemical triggers as well as recognition of its own cells; an auto-immune (immune-mediated) condition is one in which these mechanisms are deranged and the immune response is activated against the body's own cells. In the case of inflammatory bowel disease, the wall of the intestinal tract becomes infiltrated with immune cells that disrupt normal wall function.

### Clinical Signs

Vomiting, diarrhea, and weight loss are the most common signs of IBD. These signs may be chronic and intermittent, or come on suddenly and be quite severe. Constipation has also been noted in some patients.

Additionally, some pets have a poor appetite, while others are ravenous and eat excessively, or eat strange things. Occasionally, gas, bloating, and loud intestinal sounds are noticed.

Because the IBD may cause poor absorption of nutrients, the hair coat may seem dull and lifeless, or the pet may be excessively tired and lethargic.

Some patients with IBD will be acutely ill due to vomiting and diarrhea, weak and dehydrated, with severe electrolyte imbalances. It is critical that patients in this condition receive support right away.

### Diagnosis

Because there are a variety of potential causes of IBD, several tests may be necessary to determine the cause. Blood tests may be used to look for other causes of intestinal upset, such as kidney or liver disease, as well as to assess your pet's general health status. Blood, urine, and stool checks may be used to determine if parasites or bacteria could be the cause.

Radiographs (X-rays) are often taken to look for tumors, lodged foreign objects, or displacement of the intestines. Sometimes a radiographic contrast agent called barium is used to highlight these abnormalities. Barium should never be used in patients with protracted vomiting, as the regurgitation of barium can cause life-threatening aspiration pneumonia.

An ultrasound may be used if a tumor of the intestine is suspected. Ultrasound is also used to determine the best way to get a sample of the intestinal tract by evaluating if the disease is segmental or diffuse and within the reach of the scope.

The biopsy of the intestinal tract is the most definitive way to confirm IBD. The biopsy may be obtained through a fiber optic video-endoscope that goes through your pet's mouth or rectum and is driven into the intestinal tract.

This procedure is painless, as it is done under general anesthesia. Most patients are released on the same day as the procedure.

If it is suspected that the problem is out of reach of the endoscope, surgery may be required to assess the intestinal tract and obtain the biopsy. Results of biopsy samples are usually available within 5-10 days of either procedure.

### **Treatment**

Treatment of IBD depends on the cause and characteristics of the inflammation determined by biopsy exams or other tests. If an underlying bacterial infection is found, a short course of antibiotic medication may be required. If the biopsy suggests that allergy to food or additives may play a role in the inflammation, a dietary change may be required.

Many biopsies reveal that the inflammation has no apparent underlying cause, meaning that the immune system is laying down inflammatory cells in the intestinal tract with no apparent underlying trigger. This type of overactive immune response is also seen with asthma or eczema, where the immune system causes excess inflammation of the lungs or skin. These cases of inflammatory bowel disease are treated with drugs that calm the immune response.

In some cases, there is more than one cause for chronic intestinal inflammation, and multiple therapies are necessary.

In many patients with low grade or intermittent intestinal inflammation, trials with diet, empiric treatment for possible parasites, and supplements to reduce inflammation are sometimes adequate to calm the inflammation. In general, it is not recommended that strong immune-modulating medications are given unless a biopsy result suggests they are necessary. Treating these medications without doing a biopsy carries significant risk.

### **Prognosis**

The prognosis for IBD is generally good. It is extremely rare that the disease is life-threatening.

As with most inflammatory diseases, IBD is a nuisance to the pet as well as his or her family. Many cases are somewhat difficult to treat and require multiple trials before a balance is established with diet and medication. It is important to be patient in the first few weeks and months after diagnosis.

### **Long Term Follow-Up**

Patients with inflammatory bowel disease are generally diagnosed and treated by the internal medicine specialists at Veterinary Specialty Center, particularly if specialized tests are necessary to establish a cause. Patients with significant inflammation that require immune-modulating medications will need to be closely followed over time for monitoring of blood tests to assess tolerance of medications and determine if dosage adjustments are necessary. Because decisions about changes in medication, diet, and supplements are based on observations made during the physical exam in addition to other testing, our recommendation is that follow-up for this disease be done at Veterinary Specialty Center. All routine preventive care should continue with your primary care veterinarian.