

## Northern Illinois Cat Clinic, P.C.

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## Inflammatory Bowel Disease in Cats

Inflammatory bowel disease (IBD) is an important and relatively common medical problem of cats. It is not a specific disease; rather, the term IBD represents several processes that are manifested as inflammation of the bowel. It may involve only the small intestine, large intestine, or stomach; in some cases, all parts of the gastrointestinal tract are affected even the mouth.

### PREVALANCE

IBD is the most common cause of chronic and/or frequent vomiting and diarrhea in cats. It can appear at any age, in both males and females, and in any type of cat purebred or mixed. Although no genetic studies have yet proven it to be passed down from generation to generation, there is a tendency for the disease to show up in siblings.

### CAUSES

The research community has determined that IBD is an immune system over reaction (hypersensitivity). In some animals, the immune system incorrectly reacts to things that appear in the digestive tract; bacteria, food, parasites, and toxins. It is as yet unknown whether some or all of these things are the actual causes, or if it is an immune system defect alone.

*The most common cause of frequent vomiting or diarrhea in the cat is inflammatory bowel disease.*

### CLINICAL SIGNS

Cats with inflammatory bowel disease may have a history of frequent vomiting (more than 1 or 2 times per month). Many owners erroneously think that this may just be hairball vomiting or “eating too fast”. Other cats have intermittent soft or diarrhea stools, or blood and mucous on the stool. Still other cats will have frequent bouts with constipation. Many cats have more than one of these symptoms.

The cat with IBD often has problems elsewhere in the body. The most common organs affected are the pancreas, and the liver. When bowel, pancreas and liver are affected in one cat it is called *triad disease*. It is also common to see ear problems (waxy, itchy ears), skin problems (i.e. chin acne, or itchy skin), weight loss, or respiratory problems like asthma. The connection here is that they are all immune system overreactions.

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Another common complaint is a period of a day or two of “not acting right”. The cat may not eat as much, and may be a bit lethargic as though there is a mild stomach upset. Inflammatory bowel disease results in abnormal function of the intestinal tract resulting in an excessive amount of gas production. This can lead to abdominal discomfort and even passing gas. Cats also experience cramping and muscle spasms. Some cats will sit hunched up, some get very quiet and some will lick all the fur off their belly to try and relieve the pain.

## DIAGNOSIS



The diagnosis of inflammatory bowel disease first requires that all other possible causes of intestinal inflammation be eliminated. This means that intestinal parasites, toxins, bacterial and viral infections, genetic defects, foreign bodies, hormone problems, allergies, and fungal infections all have to be eliminated before IBD is diagnosed. For these reasons your veterinarian may do blood work, take radiographs (x-rays), do an ultrasound and test the stool for parasites. More specialized testing includes culturing the stool, pancreatic tests, and advanced thyroid tests. Special deworming medications may be given. A biopsy of the stomach, small intestine or large intestine may be recommended at this point.

In most cases, to get the biopsy, an endoscope is passed into the cat's stomach, small intestine or colon (with the cat under anesthesia). A tiny biopsy instrument is passed through the endoscope and used to take small samples of the lining (mucosa) of the affected organ. These biopsies, while fairly superficial, are extremely helpful in determining the type of cells present.

Chronic inflammation stimulates immune cells, lymphocytes and plasma cells, to invade the stomach and/or intestinal wall. Occasionally, eosinophils and neutrophils will be found. Thus, the disease is diagnosed when these cells are identified at abnormal levels in the tissue. A pathologist will read the biopsy samples and find something like lymphocytic-plasmacytic gastritis (stomach) or enteritis (intestine), or perhaps eosinophilic colitis (large intestine). There are many possible variations. This biopsy also helps eliminate cancer as a cause of the symptoms.

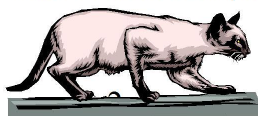
## TREATMENT

The most frustrating thing about treating this disease is that it is *not curable*. The disease is chronic and requires treatment throughout the cat's life.

Some cats with IBD respond to a change in diet. There are several approaches that can be taken. First, a food is chosen that contains a protein source that the cat has not eaten in the past. If changing protein sources is not helpful, a high-fiber diet or an easily digestible diet is tried. A true food trial requires that the test diet be fed *exclusively* for 6-8 weeks. Unfortunately, many cats will not take to a new diet and some owners find it difficult to feed their cat an exclusive diet long enough to properly test it. Even without a special diet many cats with IBD need supplemental vitamins like potassium or B vitamins because they do not absorb nutrients properly.

If dietary therapy is not successful or feasible, medications are used to suppress the inflammatory reaction. There are many medications to choose from depending on the severity and type of symptoms. Metronidazole is a bowel specific antibiotic that also has anti-inflammatory properties. It can be used alone or in conjunction with other medications like steroids. Corticosteroids ("cortisone") are the most effective so they are used first. Prednisolone is the most effective of the corticosteroids and has the least side effects. However, it is not effective in all cats. Sometimes a stronger drug is used initially to gain control of the disease. Then, prednisolone is tried again as a maintenance drug. Other drugs can be tried if corticosteroids are not successful. After initiating treatment, it is recommended to periodically monitor blood work for side effects to the medications, complications related to the IBD and for any new problems.

*This disease is not curable...and requires treatment throughout the cat's life.*





Corticosteroids are renowned for causing a variety of side effects in humans. Fortunately, cats are relatively resistant to these side effects as compared to humans. Regardless, to minimize any possible adverse effects, our goal is to use the lowest possible dose that is effective and to administer it on an every other day schedule. By giving prednisolone every other day, the last dose is out of the body for about 12 hours before the next dose is given. During this 12-hour period, the adrenal glands are stimulated to function and the body does not forget how to manufacture its own corticosteroids.

Veterinarians are always looking for new medications to help with this frustrating disease, especially ones that may have fewer side effects. Two of the newest ones are budesonide, a steroid that is not absorbed as readily into the bloodstream and Gastriplex, an herbal mixture with anti-inflammatory effects.

### CONTRIBUTING FACTORS

Ingestion of hair that occurs with grooming may lead to development of hairballs, especially in cats that are prolific groomers. While this hair does not lead to IBD, it can be a contributory source of gastric (stomach) or intestinal irritation.

Stress can also lead to flare-ups of intestinal discomfort. This can be something as simple as having houseguests over for the weekend (for a very shy cat), or something obviously stressful like boarding while you are on vacation.

### PROGNOSIS

The most important thing to remember is that nearly all cats need medication or a special diet for the rest of their life. In most cats inflammatory bowel disease can be controlled this way quite successfully. The biopsy results help us to understand how severe the disease is and what the prognosis will be. Cats with IBD are, unfortunately, more prone to develop other medical problems, especially if the disease is not well controlled. Some of the most common complications include: intestinal cancer, diabetes, kidney disease, pancreatic disease and liver disease. This is another reason for careful monitoring of your cat's health with periodic physical exams and blood work.

*Periodic physical exams and blood work are necessary to monitor for complications of IBD, side effects to medications, and to watch for new problems ....*

