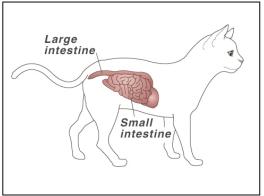
# INFLAMMATORY BOWEL DISEASE

## What is inflammatory bowel disease?

Inflammatory bowel disease (IBD) is not syndrome rather than a disease. The syndrome is a specific reaction that the stomach or intestines have to chronic irritation.

# What are the clinical signs of IBD?

IBD can involve any part of the gastrointestinal tract, but most commonly affects the stomach and/or the intestines. If the stomach is involved, your cat will experience chronic vomiting. This is the most common clinical sign of IBD in cats. If the intestines are involved, chronic diarrhea



will occur. In some cats, both parts of the digestive tract are involved so both vomiting and diarrhea occur.

If the syndrome lasts for more than a few months, weight loss and poor appetite are common.

#### When is IBD most likely to occur?

IBD is most common in middle-aged to older cats, usually 5-12 years of age.

# How is IBD diagnosed?

The chronic irritation that causes IBD stimulates the body to send cells from the immune system to the area. The most commonly found cells are lymphocytes and plasmacytes. Occasionally, eosinophils and neutrophils will be found. Thus, IBD is diagnosed when these cells are identified in abnormal levels in the tissue.

IBD is definitively diagnosed on the basis of tissue biopsies. Obtaining these samples is a surgical procedure requiring general anesthesia. Depending on the suspected location of the IBD, the veterinarian will either recommend an endoscopic procedure or a full exploratory surgery. If the small intestine or the upper large intestine are suspected to be involved, the procedure will require an exploratory surgery, primarily because these areas aren't accessible to an endoscope. In this case, it is common to take samples through all the layers of the wall of the affected organ. If it is mainly the stomach or colon that is affected by the condition, tissue samples can be obtained via an endoscope. When an endoscope is used, a tiny biopsy instrument will be used to take small samples of the lining or mucosa of the affected organ.

The tissue biopsies will be sent to a veterinary pathologist for diagnosis. The pathologist will give a descriptive diagnosis to the syndrome, calling the disease lymphoplasmacytic gastritis (stomach), lymphoplasmacytic enteritis (intestine), or lymphoplasmacytic colitis (colon).

#### Is that all that is required for diagnosis?

The tissue reaction that occurs in the stomach, small intestine, or colon is diagnosed with biopsy. However, determining what is causing the tissue reaction to occur usually requires further testing. Tests or treatments will be performed to rule out stomach and intestinal parasites, cancer, and infections. Blood tests to rule out problems with the kidneys, liver, and pancreas, as well as diseases such as hyperthyroidism and diabetes, are performed. In some cases, the exact cause cannot be determined.

#### How is IBD treated?

The ideal way to treat this problem is to diagnose the underlying disease that is causing the reaction. If an exact cause cannot be found, the disease is called *idiopathic*. That means that a disease is present, but there is no known cause. Many cases of IBD are considered idiopathic. Some cats with IBD respond to a change in diet. This is done in two ways. First, a food is chosen that contains a protein source that is new to the cat. If that is not effective, a high-fiber diet is tried. Unfortunately, a true food trial requires that the test diet be fed *exclusively* for six to twelve weeks.

If dietary therapy is not successful or infeasible, drugs are used to suppress the inflammatory reaction. Corticosteroids ("cortisone") are generally the most effective medications and are used initially. Other drugs are tried if corticosteroids are not successful.

# Do corticosteroids cause side-effects in cats?

Corticosteroids are notorious for causing a variety of side-effects in humans. However, cats appear to be less likely to have side effects from these medications. Regardless, to minimize any possible adverse effects, our goal is to use the lowest dose that is effective and to give it on an every other day schedule. It will be necessary to begin therapy with a rather high dose, but once response occurs, the dose is gradually tapered to the minimal effective dose.



#### Why is it better to administer steroids every other day?

Prednisolone or prednisone, the most commonly used corticosteroids, are in the body about thirty-six hours after it is given by mouth. If it is given daily, some of the previous day's dose is still present. The adrenal glands produce corticosteroids for the body. If a prolonged level of prednisolone is in the body, the adrenal glands receive a message telling them to stop production. This will affect the production of corticosteroids and other important substances.

By giving prednisolone every other day, the last dose is out of the body for about twelve hours before the next dose is given. During this twelve hour period, the adrenal glands are stimulated to function.

The cat's adrenal glands function primarily in the morning hours. By giving prednisolone in the evening, the dose will be wearing off when the adrenal glands are ready to work. Thus, the preferred way to give prednisolone on a long-term basis is to give it every other evening. Even if several tablets are given, all are given at the same time.

#### Does this mean that I will be giving prednisolone to my cat for the rest of its life?

Long-term therapy is required for most cats diagnosed with IBD. Generally, a cat is treated for a few months then prednisolone is discontinued to see if it is still needed. If the signs of vomiting or diarrhea recur, treatment is resumed. Many cats will respond to periodic injections of corticosteroids if oral medications are difficult to administer. The disadvantage with long-acting injections is that once the medication is administered, it can't be neutralized if there are any problems.

#### Are other anti-inflammatory drugs used?

Prednisolone is the most effective anti-inflammatory drug with 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.

#### Could stomach infections be a cause of IBD?

There are some spiral-shaped bacteria that can cause vomiting in cats. The most common is *Helicobacter pylori*. These bacteria have been shown to be the cause of disease, including stomach ulcers, in humans and are also pathogens in cats. However, they are also found in many normal cats and humans. Therefore, just finding spiral-shaped bacteria on biopsy is not always meaningful. It is considered a pathogen only if there is an associated inflammation in the stomach mucosa.

#### Are these infections treatable?

Usually when found in humans, successful treatment may require several medications or combinations of medications. Currently we are using what is effective in humans to treat cats. This approach is successful in most cats, but we are continuing to determine the most effective means of treatment.

## Can these bacteria affect me or my family?

This is a concern for all of us who have cats. It has been demonstrated that many people have these bacteria in their stomach for decades before disease occurs. Therefore, it is almost impossible to know the source of the bacteria. It is doubtful that cats are involved in the transmission process, but that has not been determined at this time.

#### What about hairballs?

Some cats are meticulous groomers. These cats usually swallow hair every day. Since hair is not digestible, it could represent a source of chronic irritation to the stomach or intestines. Frequent brushing and the use of hairball medications may be recommended for cats with IBD, especially if they have a history of vomiting or passing hairballs. The role of hairballs in IBD has not yet been fully determined.

#### What is the prognosis?

If response occurs to a diet change, the cat can be maintained on the new diet for the rest of its life, provided the diet is appropriately balanced. If the cat responds to medication for stomach bacteria, a good prognosis is justified. If response occurs to corticosteroids, the long-term prognosis is also good if administration of the drug is feasible. However, if there is no response to diet or corticosteroids, the prognosis is more guarded, pointing this case, further testing is suggested to see if an underlying disease can be identified.

This client information sheet is based on material written by Ernest Ward, DVM

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