

This handout is emailed to the client when the diagnosis of IBD is confirmed. The client is asked to read this material prior to the recheck for suture removal at approximately 10 days post-op. It is at this recheck that treatment begins. If the client has read this handout, communication is greatly facilitated.

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Inflammatory Bowel Disease

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 which are manifested as inflammation of the intestines (bowel). It may involve only the small intestine, large intestine, or stomach; in some cases, all parts of the gastrointestinal tract are affected. It results in recurrent or chronic vomiting, chronic or recurring diarrhea, or both. Weight loss is common in advanced cases.

Contributing Factors

Ingestion of hair can occur with grooming and may lead to development of hairballs, especially in cats who are prolific groomers. Although it might contribute to gastric (stomach) or intestinal irritation, it is more likely that vomiting of hairballs is the result of IBD. As IBD develops the small intestinal walls thicken resulting in a slowing of motility and a slowdown of movement of hair through the intestinal tract.

Causes

By definition, the cause of IBD in the cat is unknown.

Clinical Signs

Three general presentations have been identified for IBD: (1) chronic vomiting, (2), chronic diarrhea, and 3) weight loss. Vomiting or diarrhea often begins as an intermittent event but, over months to years, progresses to the point that medical care is sought. *Contrary to prior belief, most vomiting is due to disease in the small intestine and not in the stomach.* Most cats with vomiting or diarrhea that persists long enough will also have weight loss because the intestinal wall gets so thick that absorption of nutrients does not occur properly.

Diagnosis

The first step in diagnosis is an ultrasound study of the stomach and intestinal walls. If the walls of either organ are thickened, further tests are needed. This disease is considered a “diagnosis of exclusion” so various tests and treatments are used to confirm a diagnosis of IBD.

Chronic inflammation stimulates immune cells, primarily 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 in abnormal levels in the tissue. A pathologist is responsible for this part of the diagnosis; the pathology report usually labels the disease lymphoplasmacytic gastritis (stomach), lymphoplasmacytic enteritis (intestine), or lymphoplasmacytic colitis (colon). Occasionally, the immune cell type involved is the eosinophil. In this case, the disease is called eosinophilic gastritis, enteritis, or colitis.

In order to obtain these cells to make a diagnosis, a biopsy is required. The majority of the inflammatory response occurs in the small intestine, not in the stomach. Therefore, biopsies of the stomach are usually not sufficient to make the diagnosis. Many cats with lymphoma (cancer) of the small intestine have the same clinical signs and similar ultrasound findings. The only way to distinguish between the two diseases is with a biopsy.

In the past we have used an endoscope to try to diagnose IBD. However, it is not possible to reach most parts of the small intestine of the cat with an endoscope. In addition, the biopsies taken with an endoscope do not sample all of the layers of the organ; they are not “full thickness biopsies.” The pathologist needs all of the layers of the affected organ to fully understand the disease. Therefore, surgery is needed to biopsy the small intestine.

While the presence of an inflammatory process is determined with a biopsy, isolating the cause of the inflammation will usually require other tests. Tests or treatments should be performed to rule out stomach and intestinal parasites, cancer, and infections. Diseases such as hyperthyroidism and diabetes are considered. In addition, diseases of the kidney, liver, and pancreas should also be ruled out. In many cases, the cause cannot be determined so the disease is termed Inflammatory Bowel Disease.

Treatment

When possible, the specific disease is diagnosed and treated. Sometimes the above mentioned tests will determine the cause, and sometimes a cause cannot be found. Unfortunately, by definition IBD is a disease for which a cause is not found.

Our treatment protocol is as follows. Note that some of these steps are part of the diagnostic process by eliminating potential causes.

1. A hypoallergenic diet is used to test for food allergy. Since the protein portion of the food is the portion that stimulates an abnormal (exuberant) immune response, test diets are constructed to avoid immune stimulation. One approach is to use a hydrolyzed protein diet. In this diet the protein molecules are broken down into pieces so small that the immune system cannot detect them. Without immune stimulation the allergic reaction cannot occur. Another approach is to feed a diet that contains a protein source to which your cat has never been exposed. Diets composed of rabbit, duck, or venison are the most common.

A food trial requires time for the body to remove the offending protein that has been in the normal diet. This takes about six to eight weeks. Therefore, a food trial lasts eight weeks, at which time the signs of vomiting or diarrhea should terminate.

For a food trial to be successful, your cat must eat the hypoallergenic diet *exclusively*. Eating other cat food, dog food, table food, or treats is strictly prohibited. Any “mistakes” requires beginning again.

2. A corticosteroid (“steroid”), such as prednisone or prednisolone, is used to suppress the body’s immune system. It is started at the same time as the hypoallergenic diet. If your cat is unable to be given a pill by mouth, a long-acting injectable steroid, such as Depo-Medrol, is given every 4 weeks.

3. Probiotics are nutritional supplements that supply the bacteria needed for digestion (“good bacteria”). Veterinary probiotics are formulated specifically with the bacteria needed to help cats

(and dogs). Proviale is a capsule containing a chicken-flavored powder. The capsule can be given directly down the throat or opened and sprinkled into canned food. FortiFlora is a powder that is sprinkled into food. Either product is acceptable and is given for 30-60 days.

4. Vitamin B12 is not synthesized (made) in the cat. It is found in adequate amounts in commercial cat foods. When the food is digested vitamin B12 is absorbed through the walls of the small intestine. Small intestinal disease prevents proper absorption. Therefore, an injectable form of B12 is given subcutaneously (under the skin) for several weeks beginning with twice per week injections then going to once per week injections. One of the side benefits of B12 administration is that this drug often stimulates the appetite of cats that are not eating well. If you are not comfortable with subcutaneous injection technique, we will be glad to demonstrate it or you can go to our Facebook page to the video on giving subcutaneous injections.

5. Some intestinal parasites can cause chronic inflammation in the small and large intestines. Fenbendazole is given orally for 5 days. It is a very wide-spectrum anti-parasitic drug that will eliminate any relevant parasites.

6. Some cats develop chronic intestinal disease due to the overgrowth of certain bacteria. This condition is called dysbiosis. Metronidazole is an antibiotic that can control the “bad bacteria” very effectively. It is given orally for 30 days.

The steroid, a probiotic, vitamin B12 injections, fenbendazole, and metronidazole are started at the same time as the hypoallergenic diet.

If the clinical signs (vomiting, diarrhea, or both) are gone after two months of treatment, the steroid is discontinued and the hypoallergenic diet is continued for one more week.

If the clinical signs do not return, food allergy is diagnosed. The test diet or another one your cat can tolerate is continued, but the steroid is no longer needed. Thereafter, your cat’s intestinal disease is controlled with diet.

If the clinical signs return, it is not a food allergy so the hypoallergenic diet is discontinued and the steroid is resumed. At that point a different diet is used which is highly digestible, high in protein, and low in carbohydrates. If control is regained, this diet is continued long term.

If the clinical signs are not gone after the first two months of treatment, your cat does not have a food allergy. The hypoallergenic diet is discontinued and a different diet is used which is highly digestible, high in protein, and low in carbohydrates. Another immune-suppressing drug, cyclosporine (Atopica), or a chemotherapeutic drug, lomustine, is added in an attempt to better control the cat’s overactive immune system. One or more of these drugs is given long-term.

If the eosinophilic form of inflammation is found by the pathologist, a steroid is given, but 2-4 doses of lomustine are given with it. This is a form of inflammation that is harder to control so more powerful drugs are needed initially.

Corticosteroids are renowned for causing a variety of side-effects in humans. Fortunately, cats are very 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.

Prognosis

In most cases, it is reasonable to expect good control of the disease using a steroid and a highly digestible diet. However, cure should not be expected until research finds the cause of this disease.

Urgency

There is mounting evidence that IBD will transform to lymphoma, a form of cancer, when the disease occurs (and is not treated) for months to years. Therefore, it is important to diagnose and treat this disease as early as possible.