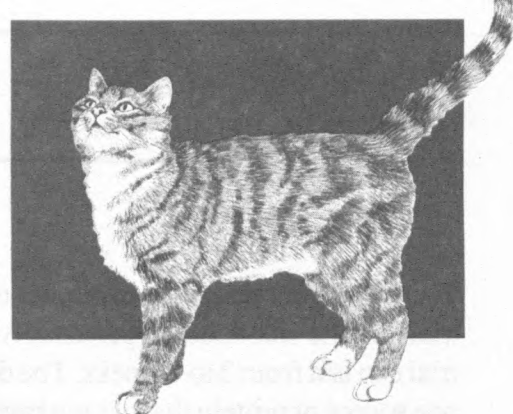
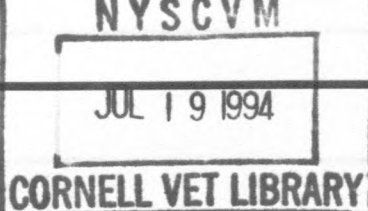


# Perspectives On Cats

A Newsletter for Cat Fanciers  
From The Cornell Feline Health Center



Summer 1994

## NEWSLETTER

### Inflammatory Bowel Disease Is Common Cause of Digestive Problems in Cats

There are few things more frustrating than having a cat that is suffering chronic bouts of vomiting and diarrhea. Vomiting or diarrhea cause dehydration, and if left untreated, can become a life-threatening situation. Therefore, any cat displaying those signs should be examined by a veterinarian. There are many possible causes of vomiting and diarrhea (see table 1), but inflammatory bowel disease (IBD) is one of the most common.

IBD describes a group of chronic gastrointestinal disorders. Microscopically the disease is characterized by the infiltration of inflammatory cells into the lining (mucosa) of the digestive tract. The cause of IBD is unknown, but the microscopic changes (histopathology) imply that immunologic factors play an important role.

The scientific names given to the different forms of the disease are tongue-twisters, but they actually describe the features of the disease. For example, the

most common form of IBD in cats is called *lymphocytic-plasmacytic enterocolitis*. Translated this means that lymphocytes (a type of white blood cell) and plasma cells (cells that produce antibody) are the primary types of cells infiltrating the mucosa; enterocolitis refers to the inflammation of the small and large intestines that occurs in this form of IBD. In cases where inflammation occurs only in the small intestines, it is called *lymphocytic-plasmacytic enteritis*. In cases of only large intestine inflammation, it is called *lymphocytic-plasmacytic colitis*. Another form of IBD is *eosinophilic enteritis*—eosinophils (type of white blood cell) are the predominant inflammatory cells infiltrating the mucosa of the small intestine.

#### Diagnosis

To rule out other causes of gastrointestinal disease your veterinarian will perform diagnostic tests that may include a complete blood count, serum biochemistries, urinalysis, fecal examinations, dietary trials, and abdominal radiographs or ultrasound. The most definitive of the diagnostic tests is the microscopic examination of small pieces of the intestinal lining (mucosal biopsy). This procedure requires that the cat be anesthetized. Usually the tissue samples are obtained by using an endoscope. This is the preferred method because it is relatively inexpensive, fast, minimally invasive, and provides a way to view the digestive tract for possible lesions.

Dietary factors, such as food hypersensitivity, may contribute to the pathogenesis of IBD, particularly with lymphocytic-plasmacytic enterocolitis.

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Therefore, your veterinarian may recommend a dietary trial to rule out food hypersensitivity. The dietary trial can last from 3 to 6 weeks. The diet contains only one source of protein that has not been part of the cat's regular diet (e.g. lamb) combined with a digestible carbohydrate (e.g. rice). The diet is highly digestible and has low residue. During the dietary trial period do not feed any treats, table scraps or dietary supplements.

## Treatment

### Dietary Management:

Because food antigens may be responsible for gastrointestinal inflammation, a simple change in diet may provide symptomatic relief to cats with IBD. Additionally, diet modification may have a positive effect on bowel motility. Several balanced commercial diets have been advocated as effective in treating IBD (Iams Feline, Tender Vittles, Prescription Diets c/d and d/d and Science Diet Feline). Homemade diets are an alternative if the cat refuses to eat a commercial diet. Your veterinarian can provide you with an appropriate recipe.

### Medical Therapy:

Corticosteroids are the drugs most commonly used to treat cats with IBD. These drugs have potent anti-inflammatory and immunosuppressive properties with relatively few side effects in cats. Additionally, corticosteroids may stimulate the appetite and enhance intestinal sodium and water absorption. Oral prednisone is the corticosteroid used most frequently because of its short duration of action and availability in appropriate tablet sizes. Injectable corticosteroid therapy with methylprednisolone acetate can be used in cats that are too difficult to medicate orally or if vomiting and malabsorption is severe. Injections are given every 2 to 4 weeks.

The antiprotozoal drug, metronidazole, also is effective in treating cats with IBD. Side effects are uncommon at low dosages, but loss of appetite (anorexia) and vomiting may occur. However, one common reaction that occurs is excessive salivation

**Table 1. Causes of Vomiting and Diarrhea**

|                                      |
|--------------------------------------|
| Parasitic Infections                 |
| <i>Giardiasis</i>                    |
| <i>Toxoplasmosis</i>                 |
| Bacterial Diseases                   |
| <i>Campylobacter jejuni</i>          |
| <i>Salmonella sp.</i>                |
| <i>Mycobacteria</i>                  |
| Fungal Diseases                      |
| <i>Histoplasmosis</i>                |
| Viral Diseases                       |
| <i>Feline immunodeficiency virus</i> |
| <i>Feline leukemia virus</i>         |
| <i>Feline infectious peritonitis</i> |
| Food allergies                       |
| Neoplasia                            |
| <i>Lymphosarcoma</i>                 |
| <i>Adenocarcinoma</i>                |
| Hyperthyroidism                      |
| Bacterial overgrowth                 |
| Excessive pancreatic insufficiency   |
| Intestinal obstruction               |
| Functional bowel disorder            |

by cats after receiving the pill. This is probably a response to the sharp, unpleasant, metallic taste of the medication. Sulfasalazine is a medication that is often used if large bowel inflammation (colitis) predominates.

If none of these medications successfully control the signs, more potent immunosuppressive drugs may be necessary, but they necessitate closer monitoring by your veterinarian.

Whatever the treatment protocol, it is imperative to explicitly follow your veterinarian's instructions. Relapses commonly occur if the treatment regime is not followed. In most cases, the prognosis for IBD is good for control but poor for a cure. ■



*Q: My eight-year-old cat has been diagnosed as having severe gingivitis. She has been treated with antibiotics and prednisolone. About five years ago she had her teeth cleaned and had three teeth extracted. Since that time her gums are always inflamed. Is there something that can rid her of this problem? It must be so uncomfortable for her.—S.R., New York*

**A:** Gingivitis (inflammation of the gums) has many potential causes. The most common initiating event is excessive tartar buildup on the teeth and can largely be prevented by having your cat's teeth cleaned and gums treated by your veterinarian on a regular basis. The frequency depends on each individual cat: some may require multiple visits per year. Although not known with absolute certainty, feeding dry food may slow the buildup of tartar.

A few cats with severe gum disease have other predisposing problems so a good physical examination accompanied by appropriate tests may be necessary. Immunosuppressive diseases such as feline leukemia virus or feline immunodeficiency virus can precipitate gum infections. Severe kidney disease and diabetes mellitus are examples of other disorders that promote or allow gum disease. Very rarely, gingivitis may be hard to differentiate from cancer or other types of gum disease so your veterinarian may wish to remove a small piece of the diseased gum and have it examined by a veterinary pathologist.

Dental diseases or retained roots from broken teeth can cause inflammation of the adjacent gum. Dental radiographs will show if there are any retained roots or deeper infections in the sockets.

Even with extensive diagnostic testing, the initial cause of some cases of gingivitis cannot be determined. Veterinarians are investigating numerous possibilities, but until definite causes are found, control will be difficult. Unfortunately, regardless of the cause of the gingivitis, untreated gum inflammation ultimately leads to problems in the other tissues surrounding the tooth. Frequent examinations, teeth cleaning and polishing, and if needed, extractions and periodontal procedures performed by your veterinarian will help control gingivitis. Various combinations of antibacterial, anti-inflammatory, and/or immunosuppressive medications may be helpful in some cases. Brushing your cat's teeth at home with a special toothpaste or regular use of mouth rinses may keep the gums healthier between visits.

*Q. Is one breed of cat inherently more healthy than another?—R. C., California*

## Perspectives On Cats

*A Newsletter for Cat Fanciers  
From The Cornell Feline Health Center*

The ultimate purpose of the Cornell Feline Health Center is to improve the health of cats everywhere, by developing methods to prevent or cure feline diseases, and by providing continuing education to veterinarians and cat owners. All contributions are tax-deductible.

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A. All things being equal, there are few differences among breeds. However, degrees of inbreeding and rearing conditions certainly do play a major role in health. Some catteries are overcrowded and fail to follow sound management principles and will produce unhealthy cats, regardless of the breed. Also, some cat breeds are more prone to have certain kinds of problems. For example, Persian cats are more prone to have tearing problems and Manx cats are more prone to have urinary or fecal incontinence. I would recommend reading Medical, Genetic and Behavioral Aspects of Purebred Cats, edited by Ross D. Clark (published by Forum Publications, 1992), for more complete information on purebred cats.

*Q. As a pet store owner I am interested in knowing if 14 weeks is an acceptable age to spay or neuter cats and what is the earliest age that I can test for the feline leukemia virus and feline immunodeficiency virus?—K.D., Texas*

A. Traditionally, dogs and cats have been spayed or neutered at about six months of age, although I am unaware of any research that demonstrates that this is the optimal age. More recently and probably prompted by the pet overpopulation problem, veterinarians have been investigating early-age sterilization (i.e., 8 weeks of age). There have been no long-term studies performed with early spaying or neutering cats, but most veterinarians feel that the advantages probably outweigh the disadvantages in most situations. The House of Delegates of the American Veterinary Medical Association (AVMA) adopted Resolution 6 that states "the AVMA supports the concept of early (8 to 16 weeks of age) ovariohysterectomies/gonadectomies in dogs and cats, in an effort to stem the overpopulation problem in these species." There are many veterinarians who are still very cautious about early sterilization due to the lack of good long-term studies.

Cats can be tested at any age for feline leukemia virus infections. The tests scan for the presence of a certain viral protein—called p27—in a cat's bloodstream. Because this protein is a piece of the virus,

antibody from the queen cannot interfere with the test.

Tests for feline immunodeficiency virus detect the presence of antibody that an infected cat produces. Thus, if a queen is infected, she will pass on these antibodies to her kittens via the colostrum causing the kittens to test positive. Passage of the infection from an infected queen to her kittens is relatively rare, so if a kitten less than 3 months of age tests positive, most likely it is maternal antibody rather than the kitten's own antibody. A kitten can be checked at any age, but if he/she tests positive at less than 3 months of age, it is advisable to retest at a later time (4 to 6 months of age) when the queen's (maternal) antibody is no longer present in the kitten.

**Please send your cat health questions to: POC Mail Bag, Cornell Feline Health Center, 618 VRT, Ithaca, NY 14853-6401. ■**

## Book Bits

**Excessive Shedding**—Shedding of hair is a normal event in the life of a cat. Because shedding is greatly influenced by daylight (the photoperiod), it tends to be exaggerated in outdoor cats in the spring and the fall and may be dramatic enough that the owner believes the cat to be sick. Nonseasonal shedding is seen in indoor cats and in cats that are chronically ill. The shedding of hair by the indoor cat can be frustrating to an owner, but is correctable by establishing a natural photoperiod. Otherwise, the owner is burdened with daily brushing and combing in order to remove shed hairs before they cover rugs, furniture, and clothing, or accumulate as hairballs in the cat's stomach.—*From The Cornell Book of Cats by Mordecai Siegal and Cornell University. Copyright (c) 1989 by Mordecai Siegal and Cornell University. Reprinted by permission of Villard Books, a division of Random House, Inc.*

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*To learn more about the care of cats and how to provide a healthy environment for them, order your own personal copy of The Cornell Book of Cats (see page 7 to order). ■*

## Honor Roll

We are grateful and pleased to report that many fellow cat lovers responded generously to the *Director's Message* in our last newsletter. Your support helps to ensure that the staff of the Feline Health Center can continue their efforts in educational outreach programs and in the development of vaccines and treatments for cat diseases. However, a chronic need for funds continue as we enter a new fiscal year. If you would like to make a tax-deductible contribution to the Center, please use the enclosed envelope.

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## Purr-fect Gifts

### Tee-shirts (\$14 includes shipping charges)

These shirts are a 50/50 blend of polyester and cotton. The shirt has an attractive design of a cat and kitten with the Center's logo. Colors: pink, light blue, light green, grey, and white. Sizes (adult only): small, medium, large, X-large and XX-large.

### The Cornell Book of Cats (\$30 includes shipping charges)

This comprehensive reference on cat health care is a must for every cat owner's library. By ordering directly from the Center you will receive an autographed copy by the director, Dr. Fred Scott.

### Gift Memberships (\$12)

Order gift memberships for your friends and receive a 20% discount off the price of a regular membership. Your friends will also receive a special letter acknowledging your thoughtful gift. Excellent gift for birthdays, anniversaries, and other special occasions.

### Honor Certificates (\$25)

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## In the News

### ***New Antifreeze is Safer for Pets***

Safe Brands Corp. has introduced a new type of automotive antifreeze that is phosphate-free and less toxic to animals. The new antifreeze, Sierra Antifreeze and Coolant, is made with propylene glycol instead of ethylene glycol. Toxicologic studies have not been performed in cats; although a much safer alternative, it may still have toxic properties for cats since propylene glycol has been identified as causing early red blood cell destruction.

### ***Changes in Pet Food Labeling***

The Association of American Feed Control Officials (AAFCO) in August 1993 approved the discretionary listing of caloric content on cat and dog food labels. This new ruling will make it easier for cat owners to adjust their cat's feedings based on caloric content of food and their cat's requirement for energy. A basic guideline for feeding a healthy adult

cat is to provide 30 kilocalories per pound of body weight per day as a starting point.

Also during 1994 pet food manufacturers will be complying with the AAFCO's nutrient profiles for cat foods. Labels will begin to state that the cat food is guaranteed to meet the requirements for "maintenance of adult cats." Also the statement "meets or exceeds minimum requirements" will be replaced with statements indicating feeding trials to ensure the performance of pet foods being tested. All these changes should help ensure better nutrition for cats.—(Resource: *Cat Fancy*, January 1994)



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