

# Gastroenteritis and Enterocolitis

(Sudden Vomiting and/or Diarrhea)

## Basics

### OVERVIEW

- Very sudden (known as “peracute”) inflammation of the stomach and/or intestines of dogs and cats, characterized by a sudden onset of (and sometimes severe) vomiting and/or diarrhea.

### GENETICS

- Unknown; however, specific small-breed dogs may be more likely to develop gastroenteritis/enterocolitis than other breeds

### SIGNALMENT/DESCRIPTION OF PET

#### Species

- Dogs
- Cats less often

#### Breed Predilections

- All breeds can be affected, but the incidence is greater in small-breed dogs; breeds most represented include miniature schnauzers, dachshunds, Yorkshire terriers, and miniature poodles

#### Mean Age and Range

- Any age range

### SIGNS/OBSERVED CHANGES IN THE PET

- Clinical signs are variable in both the course and severity of the disease; the disease usually is very sudden (peracute) and pet was often “quite normal” shortly before becoming ill
- Most pets affected have been healthy prior to having signs, with no historical environmental changes or other ongoing disease involving the stomach and/or intestines
- Signs usually begin with sudden (acute) vomiting and/or diarrhea, lack of appetite (known as “anorexia”), and depression. Diarrhea can range from soft stool to mucoid and even bloody and watery
- Signs can be short-lived lasting only a few hours or can progress with repeat episodes of vomiting and/or diarrhea over several days
- The pet generally can be very alert and active or more depressed and weak
- Skin turgor (turgor is the normal fullness or tension of tissues resulting from fluid content) may appear normal due to the very sudden (peracute) nature of the disease and the lag time in body fluids moving from the skin



tissues into the central organs (known as “compartmental shifts”), so that the skin turgor does not reflect the pet's dehydration

- The abdomen may be painful when the veterinarian feels it (known as “abdominal palpation”) and s/he may feel fluid-filled intestines
- Rectal examination will identify diarrhea even when client has seen none
- Occasionally fever, but often body temperature is normal or even subnormal

## CAUSES

- **Often associated with ingestion of infected material (garbage, feces etc.) but has also been associated with fatty meals or treats (aka “people foods”) EVEN treats a pet may “normally receive”**
- Type 1 hypersensitivity reaction (immune reaction) directed against the dog's intestinal lining
- Bacterial cultures of some dogs with **hemorrhagic gastroenteritis** yield mostly pure cultures of a bacteria, *Clostridium perfringens*, and its related intestinal poison (known as an “enterotoxin”), but the significance of these findings is unknown
- Searches for poison-producing (known as “toxigenic”) *E. coli* strains have been unrewarding, but it is possible that toxigenic *E. coli* may be involved in some pets
- Recurrent bouts can be traced to bacteria or other chronic GI parasitisms

## RISK FACTORS

- Unknown
- Most dogs and cats are previously healthy with no major ongoing illness

# Treatment

## HEALTH CARE

- Pets suspected of having acute gastroenteritis/enterocolitis can be treated as outpatients unless weak and dehydrated
- Physical examination and fecal analysis can often determine cause
- X-rays may be needed to rule out intestinal blockage
- Antibiotics to counteract infection
- Anti-emetic (anti-vomiting) medications like metoclopramide or maropitant
- Fluid-volume replacement is required if dehydrated, can be done with “SQ” fluid therapy

## ACTIVITY

- Restricted and controlled to limit access to food/water and contaminants

## DIET

- No food or drink by mouth (known as NPO) during acute disease
- During recovery period, feed a bland, low-fat, low-fiber diet for several days before returning to the normal diet

# Medications

Medications presented in this section are intended to provide general information about possible treatment. The treatment for a particular condition may evolve as medical advances are made; therefore, the medications should not be considered as all inclusive

- Injectable antibiotics are given because of the potential for the spread of bacteria and their poisons in the blood (known as “blood poisoning” or “septicemia”) and possible implications of the bacteria, *Clostridium perfringens*, being involved in the disease; ampicillin is recommended
- Alternate antibiotic choices include trimethoprim-sulfa or cephalosporins; ampicillin in combination with a fluoroquinolone (such as, enrofloxacin) is suggested in cases of suspected septicemia
- Antibiotics by mouth and intestinal protectants are of little benefit, and generally not administered unless intestinal infection is present
- Rectal administration of agents to protect the lining of the intestines (known as “mucosal protectants”) is of

questionable value

- Drugs to control vomiting (known as “antiemetics”) may be given for severe vomiting
- Drugs that change the motility of the intestines (known as “intestinal motility modifiers”) are not considered necessary and are not recommended
- ProBiotics to recondition gut flora proving more useful

## **Follow-Up Care**

### **PATIENT MONITORING**

- If clinical improvement is not seen in 24–48 hours, reevaluate the pet, as other causes of clinical signs are probable

### **POSSIBLE COMPLICATIONS**

- Could progress to more severe and related disease hemorrhagic gastroenteritis
- Pancreatitis, intestinal foreign objects could cause similar signs

### **EXPECTED COURSE AND PROGNOSIS**

- Course of the disease is generally short, lasting from 24 to 72 hours
- Prognosis is good, and most pets recover with no complications
- Dehydration if signs continue
- Sudden death is uncommon

## **Key Points**

- Very sudden vomiting and/or diarrhea is main signalment
- Medical treatment if signs last more than 12-24 hours or are more severe
- With appropriate therapy, mortality is usually low
- Recurrence is reported in about 10–15% of affected dogs
- Avoiding fatty foods may help prevention