



**DANADA VETERINARY HOSPITAL, P.C.**

## **Hemorrhagic Gastroenteritis In Dogs**

Hemorrhagic gastroenteritis (HGE) is a common disorder of dogs that is characterized by the sudden development of vomiting and/or diarrhea. The vomitus and the diarrhea may contain variable amounts of bright, red blood or dark, digested blood.

### ***Contributing Factors***

There are no known contributing factors. Most dogs appear healthy prior to the onset of clinical signs.

### ***Prevalence***

Any breed may be affected but certain breeds are more often involved. Usually, the dog is a young to middle-aged small breed, such as the miniature Poodle, miniature Schnauzer, Dachshund, and Yorkshire terrier.

### ***Causes/Transmission***

The exact cause of HGE remains unknown. However, a leading theory is that the condition is triggered by an endotoxin from a bacteria called *Clostridium perfringens*.

### ***Clinical Signs***

There is some variability in both the severity and course of this disease; signs generally have a very sudden onset. Vomiting is followed by bloody diarrhea. The rapid onset of profound dehydration is one of the hallmarks of HGE. The continuing loss of bodily fluids can progress so rapidly that hypotension (low blood pressure) and shock develop. Fever is not a typical finding.

### ***Diagnosis***

The diagnosis of HGE is one of exclusion, meaning other possible causes of bloody vomitus and/or bloody diarrhea must first be considered. Some of these possible causes include ulcers, trauma, gastrointestinal tumors or obstruction, foreign bodies, infectious diseases, and coagulation disorders. Evaluation of these other causes might require such tests as a complete blood count, biochemical analysis of the blood, urinalysis, x-rays, coagulation tests, fecal evaluation, ultrasound or endoscopic (fiberoptic) evaluation of the gastrointestinal tract. Because the cost of all these tests could be significant, it is sometimes prudent to treat the dog for a short while with supportive care to see if the signs resolve. More details on this are given below.

A hallmark of HGE that is useful in diagnosing the illness is that affected dogs typically have an extremely high hematocrit (percentage of red blood cells in their blood). Most normal dogs have a hematocrit of 35-55%, while dogs with HGE may have hematocrits well above 60%. While some breeds

such as greyhounds have naturally occurring high hematocrits, very few diseases can make this percentage go as high as HGE. If your pet presents with symptoms of HGE, a hematocrit (or manual packed cell volume) is often one of the first diagnostic tools employed.

## ***Treatment***

Dogs with HGE will appear profoundly ill and, if left untreated, may die. In most cases, the disorder runs its course in a few days if the animal is given appropriate supportive care. Intravenous therapy given at the veterinary hospital provides the cornerstone of therapy for HGE. Fluids given under the skin (subcutaneous fluids) are not considered adequate to meet the significant fluid requirements of most dogs with HGE.

If intravenous fluid therapy is not given, the dog's red blood count will continue to elevate. Eventually, the blood may become so thick that it flows very slowly through the blood vessels. In this situation, the dog is at risk for a potentially fatal clotting disorder called DIC. Once DIC has begun, it is often irreversible and often leads to death of the animal.

Additional therapy may include antibiotics, symptomatic treatment for vomiting and diarrhea, and anti-ulcer medication.

## ***Prognosis***

The prognosis is usually good for complete recovery if HGE is managed appropriately and identified in a timely manner. A small number of dogs will have a later recurrence of the disorder.

Pets that present with HE symptoms should be screened for a condition called Addison's disease. This condition, which involves an under-production of cortisol, can mimic HGE, and is a life-long condition that can relapse if not identified. A blood test is usually done concurrent with treatment to rule out Addison's.