

## **CANINE HEMORRHAGIC GASTROENTERITIS**

### ***What is canine hemorrhagic gastroenteritis?***

Hemorrhagic gastroenteritis (HGE) is a disorder of dogs which is usually fairly abrupt in onset. The significant signs of HGE are vomiting and/or diarrhea containing variable amounts of blood. The blood may be bright red (fresh blood) or dark (digested blood).

### ***How is HGE diagnosed?***

The diagnosis of HGE is one of exclusion, meaning other possible causes of bloody vomiting 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 costs of all these tests could be significant, it is sometimes prudent to treat the dog for a few days with supportive care to see if the signs resolve. More details on this are given below.

HGE is most common in small breeds of dogs. The blood count of affected dogs is frequently characterized by an elevated hematocrit (red blood cell count). Most normal dogs have hematocrits of 37-55%, while dogs with HGE may have hematocrits well above 60%. The elevated hematocrit provides the veterinarian with an important clue that the dog may have HGE.

### ***What causes it?***

The exact cause of HGE remains unknown.

### ***How is it treated?***

Dogs with HGE will appear profoundly ill and, if left untreated, may die. In most cases, the disorder appears to run its course in a few days if the animal is given appropriate supportive care. Intravenous fluid therapy provides the cornerstone of therapy for HGE. Fluids given under the skin 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 due to dehydration. Eventually, the blood may become so thick that it flows very slowly through the blood vessels. In this situation, the dog is a prime candidate for a potentially fatal clotting disorder called disseminated intravascular coagulation (DIC). Once DIC has begun, it is often irreversible and may result in death.

Additional therapy may include antibiotics and anti-ulcer medication.