

Hemorrhagic Gastroenteritis in Dogs

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BASIC INFORMATION

Description

Hemorrhagic gastroenteritis (HGE) is an acute, severe form of diarrhea that occurs in dogs. The diarrhea causes large amounts of water to be lost from the body, resulting in severe dehydration. Substantial amounts of blood may also be lost into the gastrointestinal tract (gut), which can be a severe and life-threatening condition if left untreated.

Causes

The cause of HGE in dogs is not well defined. Some viral diseases (canine parvovirus, canine coronavirus) and parasites (whipworms) can cause similar signs, but HGE is thought to arise independent of these conditions. Some studies have suggested the involvement of certain bacterial toxins (moldy food), but in most cases no cause is found. Small breeds of dogs are affected more commonly than large dogs.

Clinical Signs

The most common clinical sign is a severe diarrhea that is notably bloody, which is why the disease is called *hemorrhagic gastroenteritis*. Clinical signs develop rapidly. Affected dogs may have a subnormal body temperature and shivering. The skin may feel dry and somewhat thick because of dehydration. The gums are often dry and tacky to the touch, and they may be a dark, red “brick” color.

Diagnostic Tests

Your veterinarian will recommend laboratory tests to gauge the degree of dehydration, to look for other diseases that cause similar signs, and to look for complicating conditions, such as kidney failure (caused by the dehydration). Tests may be done on a sample of the diarrhea to look for canine parvovirus and intestinal parasites. Other laboratory tests and x-rays may also be recommended.

Quick screening tests include measurement of the packed cell volume (PCV) and total protein (TP). Dogs with HGE usually have a high PCV with a normal TP, whereas dogs with dehydration from other causes usually have a high PCV and high TP. This distinction is very important in making the diagnosis of HGE.

TREATMENT AND FOLLOW-UP

Treatment Options

Dogs with HGE need intensive therapy, because they are often severely dehydrated, with sludging of the blood that can lead to failure of the kidneys, liver, and heart. Most patients require hospitalization for intravenous fluid therapy to replace lost fluids and to keep up with ongoing fluid losses from diarrhea. Dogs with HGE can deteriorate very rapidly and may die within hours after the onset of clinical signs if not treated appropriately.

Food is often withheld until vomiting resolves. Hospitalization may be continued for at least 1-2 days until the dog starts eating. Supportive care with antibiotics, electrolyte solutions, and anti-vomiting or antacid medications is also commonly provided during this time. If body protein levels decline from severe blood loss, special intravenous colloid solutions or plasma transfusions may be recommended.

Follow-up Care

Intensive monitoring of vital signs (such as heart rate, urine output, body temperature, and body weight) and laboratory tests may be required for severely ill dogs while they are hospitalized. Serial PCV, TP, and electrolyte testing is recommended for most dogs. Dogs that survive the initial crisis and respond to fluid therapy usually recover quickly and may need no further follow-up visits after discharge. If complications such as reduced kidney function occur, follow-up visits and repeat monitoring or testing are often needed.

Prognosis

HGE is an extremely serious disease in small dogs, and without treatment their prognosis is poor. With appropriate treatment, the prognosis is still uncertain in some dogs, depending on how badly dehydrated the dog was at the beginning of treatment. Even with the best intensive care, some dogs die of this disease. Dogs that survive the first 24 hours of treatment have a good prognosis. Recurrences are possible in some dogs at a later date.