

Haemorrhagic Gastroenteritis - HGE - not a new disease

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Introduction

We have had some reports, recently, of dogs falling ill with a condition called Haemorrhagic Gastroenteritis. It is not a new disease, and is not uncommon.

What is HGE?

It is an acute/sudden gastro-intestinal upset in a dog that was in good health the day before, and well cared-for. Symptoms develop very rapidly and include vomiting (sometimes with blood), putrid diarrhoea jam-like with blood (sometimes fresh looking blood). The definitive cause of the condition is unknown, but high concentrations of Clostridium bacteria are usually found.

The literature states that it affects mainly small breeds of dogs. This has, emphatically, not been my experience. I've seen dogs of all breeds, sizes, and ages affected.

Some clinicians have argued that stress, anxiety, and hyperactivity are contributing factors.

What can HGE be confused with?

- ≡ Parvo Virus infection. The experienced vet or nurse (or even receptionist!) can make this diagnosis on basis of the smell. It is very distinct. The age of the dog, its vaccination status, and a blood test, all contribute to this diagnosis.
- ≡ Coronavirus infections. This, too, is distinguished by its particular smell.
- ≡ Mechanical obstructions can present, similarly, as a vomiting and diarrhoea case that deteriorates rapidly.

- ≡ Sepsis/Septicaemia.
- ≡ Severe acute liver disease
- ≡ Shock (the lining of the gut starts to die off, and come away from the wall of the intestine)
- ≡ Other causes of gastroenteritis, of which there are many.
- ≡ Trauma affecting the gut.

How is HGE diagnosed?

It is an acute disease that sometimes results in sudden death. There is no time for diagnostic testing, so your dog depends on the vet's experience and confidence in treating. Basically: if it looks like HGE and smells like HGE, it is HGE. No argument.

How is it treated?

It is always treated symptomatically, and the treatment can vary from vet to vet. It **MUST**, however, be treated. Do not be dissuaded.

Dogs very rarely die from HGE. When they do indeed die, it is from unforeseen complications, lack of timely treatment, or under-treatment.

The dehydrated dog is placed on a drip for fluid and mineral replacement. Often these dogs have not been ill for long enough to become dehydrated, so do not need to go onto a drip. In my practice I sometimes see these cases twice that same day.

Antibiotics are recommended, making sure to cover gram negative, gram positive, aerobic, and anaerobic bacteria are included. *This recommendation conflicts with protocols used in veterinary practices where the policy is Evidence Based Medicine. In these practices they*

will not use an antibiotic unless they have had confirmation from a laboratory (culture and antibiogram) that it is an infection, and what infection it is. As we have noted, the definitive cause of HGE is not known, and the report from the lab might take a week or longer. Failure to treat these dogs in time can, and do, result in sudden death. It has been argued that this is an animal welfare issue, and failure to treat is actually unethical.

Other symptomatic treatments might include gut-protectants (such as Kaolin) and antispasmodics (such as Buscopan).

I always give a corticosteroid by injection. My argument in favour of this: if you visualise the gut lining that is producing all that blood and inflammatory mucous (the jam like diarrhoea) – that gut is extremely inflamed! Inflammation has the potential to ‘cascade’ and get out of hand, and cause the catastrophic damage to the intestine. The possible side-effects to such an injection is nil to negligible, and it will save the dog’s life. It will also dramatically decrease the chances of that dog going into physiological shock.

These dogs need to be starved of food for a full 24 hours. This allows the gut to recover, and we do not want digestive enzymes to make its way to raw gut lining. The dog must, however, be allowed to have small quantities of tepid water or replacement fluid. If you’re in the middle of nowhere, and desperate, Lucozade/Diarolyte/Coca Cola, etc will do.

The severe case must always be monitored for DIC, ie. Disseminated Intravascular Coagulation. These are the cases I check every few hours or hospitalise.

Why do some dogs die? And what is the cause of death?

It is not usually a fatal disease, but in some years the death rate can be up to 10%. I have not seen any more than a handful of dogs die of HGE in my entire career.

≡ They may die of blood loss.

- ≡ They may die of enterotoxic shock (the infection includes bacteria that manufacture toxins).
- ≡ They may die because the disease gets out of hand and they lose gut lining as well as blood.
- ≡ Hypovolaemic shock (a too sudden drop in arterial blood pressure).
- ≡ Young dogs may die of a Volvulus (the intestine forms a loop which twists, starving itself of a blood supply, resulting in that loop dying off) or Intussusception (the intestine telescopes over itself causing the blood supply to be cut off). This happens because of hyper-peristalsis. The gut is simply too active and in spasm.
- ≡ Disseminated Intravascular Coagulation. This is when microscopic clots start to form in the bloodstream, clogging up the very fine blood vessels (capillaries) everywhere in the body, including brain and lungs. DIC is not particular to HGE, but can occur as a complication to many different conditions.

What do you do if you cannot get to a vet?

Dose large quantities of Kaolin (Paediatric Kaolin) several times. This forms a protective lining on the gut wall, and absorbs gasses and toxins. It is difficult to overdose.

Dose small amounts of tepid replacement fluid or water *often*.

Keep the dog warm. All the blood is heading to the intestine (this is called 'splanchnic pooling) and the limbs and other parts of the body might be starved of a supply.

Do not feed.

If you are desperate, you would do no harm by giving your dog a penicillin tablet (providing it's not allergic to penicillin) at the normal dose rate, and a steroid tablet (1 – 5 mg is sufficient in the Norfolk Terrier). This may save its life.

Conclusion

HGE is a well-know and very old disease. It is easily confused with other conditions that cause diarrhoea with blood eg, a verminous enteritis (cause by worms!). When you see the diarrhoea starting to resemble strawberry jam and smelling 'gamey', be alert to the possibility that it may be HGE.

It is highly treatable, and deaths are rare.

Always insist that the vet treats it.