

UNDERSTANDING CANINE PARVOVIRUS

WHAT IS PARVOVIRUS?

Canine parvovirus is a highly contagious disease that spreads easily from dog to dog by direct or indirect contact with their faeces. Dogs become infected through oral contact with canine parvovirus in faeces, infected soil or fomites (object / substance capable of carrying infectious organisms). The virus attacks rapidly dividing cells such as those in the lymph nodes, intestinal lining and the bone marrow. This results in depletion of the white blood cells necessary for the immune system to function, delaying the recovery of infected puppies. The rapid death of the intestinal cells results in the sloughing (breaking away) of the intestinal lining, vomiting, diarrhoea and severe intestinal bleeding. This may eventually lead to the death of your puppy if left untreated.¹

WHAT ARE THE SIGNS OF PARVOVIRUS?

- Lethargy
- Vomiting
- Anorexia
- · Bloody diarrhoea
- Dehydration
- Collapse



WHAT IS THE TREATMENT FOR A DOG WITH PARVOVIRUS?

A diagnosis of parvovirus can be made with snap-combo tests, available at most veterinarians. There is NO CURE for parvoviral gastroenteritis as it is caused by a virus. Veterinarians can only treat the symptoms and try to keep your dog or puppy alive by preventing dehydration and loss of proteins.

Puppies infected with parvovirus need to be treated intensively and may spend a week or more at your veterinarian. Fluid and electrolyte treatment is essential and this is often combined with antibiotics. Infected puppies vomit excessively and will need to be treated with anti-emetics. These puppies are unable to absorb any nutrients from what little food they may keep down, hence it is vital to monitor their glucose, albumin (blood protein) and potassium levels and correct these as necessary.

Some puppies will require plasma transfusions to treat the low protein levels in their blood. Affected animals are normally very nauseous and are not inclined to eat on their own. Some puppies will accept force feeding while others require the placement of a feeding tube. Good nursing care is essential for puppies affected by parvovirus.

HOW DO YOU PREVENT YOUR DOG / PUPPY FROM CONTRACTING PARVOVIRUS?

The only way to prevent parvovirus is through vaccination. Puppies should receive their first vaccination at six weeks of age with two more vaccinations thereafter at 9 and 12 weeks of age. Your veterinarian will assess your puppy on its first visit and will provide you with the dates for the follow-up vaccinations.

Dogs are usually vaccinated on an annual basis thereafter. The parvovirus is included in this combination vaccine.

Should you have a puppy that has parvovirus, care should be taken when introducing new puppies into your environment as the parvovirus persists in the environment for long periods of time.

Dilute bleach is one of the readily available disinfectants that kills parvovirus but may take up to ten minutes to achieve full effectiveness.

With parvovirus, as with many other viruses that affect dogs, prevention is better than cure.



Acknowledgement of pictures: Dr Mirinda van Schoor. BVSc, BVSc (Hons), MMedVet (Med). Veterinary Specialist Physician, Onderstepoort Veterinary Academic Hospital.

Reference

1. Ettinger SJ, Feldman EC. Textbook of veterinary internal medicine. 6th ed. St. Louis (MO): Elsevier Saunders; 2005. p. 646-7.

