

## **Canine Parvovirus (CPV) infection in a Great Dane Puppy: a case Report**

### **ABSTRACT**

Canine parvovirus (CPV) infection is a major disease affecting young pups with high contagiousness and mortality worldwide. Unvaccinated pups between 6 weeks to 6 months are most susceptible to CPV infection. It manifests into enteritis and myocarditis forms. Classical signs of enteritis form include acute onset of vomiting, haemorrhagic diarrhoea, and pyrexia. A case of unvaccinated 3-month-old female Great Dane puppy was presented with complaints of hematemesis, hematochezia and shooting diarrhoea. A tentative diagnosis of CPV was made. It was humanely euthanised due to chronic body weight loss and poor response to treatments. Post-mortem examinations revealed congested lung with frothy exudate, whitish plaques on heart coronary groove, thickened intestinal mucosa, and generalised reddening in the liver and kidneys. Microscopic changes revealed interstitial pneumonia with edema, lymphocytic myocarditis, viral enteritis with villous atrophy, and liver congestion. A faecal samples for polymerase chain reaction (PCR) method revealed positive result for parvovirus. Based on pathological and PCR findings, it was definitively diagnosed with CPV infection. The chance of its survival without aggressive treatment remains low. Treatment and management are still limited to supportive care without existing agent-specific treatment. Therefore, CPV infection should be controlled and prevented by providing vaccination to the pups from the age of 6 weeks.

**Keyword:** Canine; Histopathology; Parvovirus; PCR; Post-mortem