

Canine and Feline Parvovirus Infection — Current Treatment Options

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Parvovirus infection can cause severe disease in dogs and cats. When disease is suspected, patients should be isolated and given intensive care. Even with intensive care, however, overall mortality in cats is about 50%; in dogs, survival is more likely, with a 90% survival rate if they are given appropriate treatment. Restoring fluid and electrolyte losses is the most important aspect of treatment. Feeding should be restarted as soon as possible, preferably with a highly digestible food. Antiemetics may be helpful, but drugs that alter gut motility should be avoided because they increase risk for intussusception. Hypoproteinemia is common, especially in dogs, and plasma or whole blood transfusions may be needed to restore oncotic pressure. The gut barrier is often destroyed in these patients, and intestinal bacteria may easily translocate into the bloodstream. An antibiotic with good efficacy against gram-negative organisms is recommended. Cytokines, such as human granulocyte colony-stimulating factor, have been suggested, but studies do not support their use at this time. In many European countries and Japan, feline interferon has been licensed for treatment of both dogs and cats but thus far has been shown to be helpful for parvoviral infection only in dogs. Hyperimmune serum is commercially available in some European countries but hyperimmune/immune sera can be prepared in veterinary practices that can aseptically harvest serum. It can be given by either the subcutaneous or intraperitoneal route.

COMMENTARY: Both canine parvovirus and feline panleukopenia virus (feline parvovirus) can be devastating and are more likely to occur in young animals. Vaccination is the key to decreasing risk for disease, but primarily because of maternal antibodies, vaccination breaks do occur. This presentation reviews the treatment options that are necessary for a good outcome in infected dogs and cats.—*Patricia Thomblison, DVM, MS*