

# FELINE PANLEUCOPENIA

## **Etiology**

- A parvovirus, a small non enveloped, single-stranded DNA virus.
- Closely related to canine parvovirus
- Susceptible to only a limited number of common disinfectants

## **Epidemiology**

Highly infectious

- In unvaccinated populations will be enzootic.
- Primarily a disease of young kittens as they lose maternal antibody.
- Morbidity generally 100%, but in many cases only mild or subclinical disease occurs.
- Seasonal incidence with summer and autumn peaks noted in some areas because of seasonal birth rate.

## **Post Mortem Exam**

Changes often slight.

- Dehydration a feature.
- Evidence of vomiting or fetid diarrhoea.
- Mesenteric lymph nodes may be oedematous and haemorrhagic.

## **Clinical signs**

subclinical infection, to a mild transient fever and leucopenia severe, peracute syndrome where the cat may be found dead.

In general, the disease tends to be more severe in young kittens.

The following signs are, however, often typical:

Incubation period 2-10 days.

- First signs of illness are lethargy, fever, anorexia, and apparent thirst but refusal to drink.
- Vomiting generally occurs.
- Diarrhoea less common, particularly in early stages.
- Abdominal palpation reveals fluid-and-gas-filled intestines, and may elicit pain.
- After 2-3 days, symptoms variable, e.g. fever, profuse watery diarrhoea or dysentery, severe dehydration and electrolyte imbalance.
- Anaemia not usually present though may develop in long-standing cases especially if there is intestinal bleeding.
- Subnormal temperature carries grave prognosis.
- Mortality rate varies from 25% to 75%.
- Fatalities due to overwhelming bacterial infection, dehydration, and electrolyte imbalance.

## **Diagnosis**

Presumptive diagnosis may be made on clinical signs, vaccination status, also often on a history of recent possible exposure.

- In fatal cases gross post-mortem findings may be helpful.
- From live animal: oropharyngeal swab, faeces.
- From dead cat: fresh samples of spleen, mesenteric lymph node, ileum and faeces.
- Kits for the detection of canine parvovirus antigen in faeces may also detect FPV in faeces of many, but not all, cases of FP.

## **Differential Diagnosis**

1. Presence of intestinal foreign bodies, especially if associated with obstruction or infection.
2. Acute bacterial septicaemia.
3. Toxoplasmosis.
4. Poisoning.
5. Occasionally, lymphosarcoma.

## **Treatment**

Basically aimed at:

- Controlling secondary bacterial infection.
- Combating dehydration.
- Restoring electrolyte imbalance.

Treatment therefore consists of:

- Parental, bactericidal, broad-spectrum antibiotic such as amoxycillin and clavulanic acid or a cephalosporin.
- Subcutaneous or intravenous fluids: 5% dextrose saline, lactated Ringer's solution.
  - An anti-emetic, such as metoclopramide, may reduce fluid loss.
  - Oral and liquidised foods in later stages when gastro-intestinal signs have diminished.
  - Vitamin supplements.
  - Good nursing care

## **Vaccination and Control**

one serotype both natural and vaccine induced

- highly antigenic immunity high and long-lived.
- Both modified live and inactivated systemic vaccines are available.
- Inactivated vaccines can, however, be used safely in pregnant queens and, if necessary, in young kittens.