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Feline Panleukopenia Virus Infection in Imported Cats

Sang-chul Kang, Kyung-il Kang[1], In-soon Roh[1], Heui-jin Kim[1], Young-hwa Jean[1], Jong-hee Bae and Jae-hoon Kim

Dept.. of Vet. Med., Colledge of Agriculture and Life Scinece., Cheju National Univ., Jeju, Korea

[1]National Veterinary Research & Quarantine Service, Anyang, Korea

E-mail: supervet@naver.com

Introduction

Feline panleukopenia, also known as feline infectious enteritis or feline distemper, is a highly contagious generalized disease of cats caused by feline panleukopenia virus (FPLV) [2]. The disease is most severe in young, unvaccinated kittens between 6 and 24 weeks of age and is characterized by sudden onset of pronounced depression, anorexia and fever. The mortality rate ranges from 25 to 90% in the acute form [1, 2]. This study was reports for the enteritis caused by the infection of FPLV in imported cats.

Materials and Methods

All three cats imported from Russia and Uzbekistan. One cat(No. 1) was 43-day-old female. The others (No. 2 and 3) were 2-month-old males. They showed mild emaciation, depression, anorexia. Cat No. 3 showed yellowish watery diarrhea. All cats died within one week after the onset of illness. Representative tissue specimens were collected, fixed in 10% neutral phosphate-buffered formalin, routinely processed and stained with H&E for light microscopic examination. The fluorescent antibody test for FPLV was performed on the intestine.

Results

At necropsy, all cats had segmental haemorrhage on the serosa and mucosa of the small intestine. The mucosa of the jejunum to ileum were covered with watery yellowish gray exudate. Histologically, the principal lesions of all cats were diffuse necrotizing enteritis of small intestine. The crypts were damage, dilation and bizarre formation of crypt epithelial cells. Lympholysis and lymphoid depletion were presented in Peyer's patches and other lymphoid tissues. The result of FA test revealed the characteristic FPLV antigen in the cytoplasms of crypt epithelial cells.

Discussion

This study might be the first report for FPLV infection in imported cats. The best quarantine strategy for imported cats and vaccination methods will be needed to prevent the transmission of this disease to domestic cats.

References

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