A case report of wet form Feline Infectious Peritonitis (FIP) in a domestic short hair cat

ABSTRACT

Feline Infectious Peritonitis (FIP), a fatal disease of cat exists in two major forms namely effusive and noneffusive form. FIP is caused by mutated form of Feline Coronavirus (FCoV) classified under the genus of Alphacoronavirus. Despite common prevalence of FIP in Malaysia, further diagnosis remain challenging due to the complexity of the disease which often required multiple findings to confirm the disease. This case report highlights the progressive wet form of FIP in a male domestic short hair cat named Cromox presented to the Post Mortem Unit, Faculty of Veterinary Medicine, Universiti Putra Malaysia (UPM). Manifestation of distended abdomen, icterus and flu was shown before the cat died. Postmortem and histopathology analysis of affected organs were performed and since FIP was suspected, RT-PCR against polymerase gene of FCoV was carried out. The post mortem examination revealed generalised icterus at sclera, gums and integuments, straw colour peritoneal fluid and congestion of kidney and liver. Histopathology analysis showed infiltration of mononuclear cells in liver, pulmonary edema and renal desquamation. Meanwhile, RT-PCR and partial sequencing analysis showed evidence of positive Feline Coronavirus which was closely related to the FCoV from China and Netherland. Hence, the cause of death of Cromox was confirmed due to FIP infection. Only supportive treatment can be given to the FIP affected cat since the disease is usually fatal. Vaccination against FIP is not recommended and avoiding the sick cat to share litterbox in the multihousehold cat has been proven to be an effective way to prevent the occurence of FIP.

Keyword: Coronaviridae; Feline infectious peritonitis; Histopathology; Post-mortem; RT-PCR