

PREVALENCE, GROSS AND HISTOPATHOLOGICAL FINDINGS IN THE LUNGS OF SUSPECTED HEARTWORM INFECTED CATS IN THE KLANG VALLEY, MALAYSIA

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Abstract

Feline heartworm disease is a potentially life-threatening disease of cats that most commonly manifests as heartworm-associated respiratory disease (HARD). Unlike canine heartworm disease, antemortem diagnosis is difficult due to low worm burdens, frequency of all male infections, and non-specific radiographic lesions. Thus, a combination of tests must be carried out and interpreted with care in order to make an accurate diagnosis of feline heartworm disease. Feline heartworm disease has yet to be studied in Malaysia, therefore there was a dire need to investigate and determine the prevalence rate of this disease in the country. Fifty cats comprising 14 strays and 36 pets were included in this study. Serological tests for antigen and antibody (SNAP® IDEXX and Heska ® Solo Step® FH respectively), was performed for all the samples. Knott's concentration technique, thoracic radiography, followed by necropsy and histopathology were also carried out for the stray cats. Feline heartworm disease was not detected following Knott's concentration technique or serological testing in the stray cat population. None of the pet cats were positive for feline heartworm disease following serological testing. The most common thoracic radiographic findings in the stray cats were interstitial and bronchoalveolar patterns of the lungs. The most common findings upon necropsy and histopathology included pulmonary oedema and pulmonary congestion and haemorrhage. Since there were no positive feline heartworm disease cases detected, no associations could be made between the radiographic and histopathologic findings and feline heartworm disease. The overall prevalence rate of feline heartworm disease in the Klang Valley, Malaysia was 0%.

Keywords: heartworm, lungs, feline, heartworm-associated respiratory disease (HARD), diagnosis