

CLINICO-PATHOLOGICAL FINDINGS IN DOGS AFFECTED WITH NEUROLOGICAL DISEASE PRESENTED TO THE VETERINARY TEACHING HOSPITAL, UNIVERSITY OF PERADENIYA – A PRELIMINARY STUDY

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Dogs (*Canis domesticus*) affected with neurological disease are often presented to veterinarians for professional care and advice. However, these cases often present a diagnostic challenge, as there is a dearth of scientific information with regard to the neurological diseases prevalent in dogs in our country.

The objective of this study was to identify the clinical and pathological manifestations of neurological diseases prevalent in dogs presented to the Veterinary Teaching Hospital of the University of Peradeniya. During a period of six months (January to June 2003), 16 selected dogs with neurological signs were examined clinically with particular attention to the function of the nervous system. The mental status, posture, movement, cranial nerve function, spinal reflexes, body sensation and postural reactions were assessed systematically employing standard neurological techniques. Despite the clinical attention, the animals succumbed to the disease and detailed *post mortem* examinations were carried out subsequently.

At *post mortem* examinations, samples from the brain, spinal cord and other tissues with lesions were collected and preserved for histopathological examination. The paraffin embedded tissue sections stained with haematoxylin and eosin (H&E) and special staining techniques, *viz.*, periodic acid schiff (PAS) and Massignani Malferrari were also employed on selected sections.

Primary neurological diseases, *viz.*, canine distemper, rabies, cerebral babesiosis, protozoan encephalomalacia and hydrocephalus were the common neurological diseases found in the dogs. Focal suppurative encephalitis, diffuse suppurative encephalitis and uraemic encephalopathy resulting from otitis *interna*, pyelonephritis and chronic renal failure, respectively were the secondary neurological diseases found. Although, all dogs showed deficits in the postural reactions, other neurological findings varied with the cause of the disease. In contrast to the other diseases, the clinical manifestations of focal suppurative encephalitis and protozoan encephalomalacia were indicative of a focal lesion in the brain.

Although, confirmation of these neurological diseases require pathological examination of the CNS, systematic clinical examination of the nervous system enables an accurate clinical diagnosis.

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