RESUMO SIMPLES - OUTRAS ÁREAS TEMÁTICAS

ENCEPHALIC VASCULAR ACCIDENT SECONDARY TO SYSTEMIC ARTERIAL HYPERTENSION IN A DOMESTIC CAT – CASE REPORT

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Encephalic vascular accident (EVA) is defined as an abnormality originating from lesions in the blood vessels responsible for irrigating the brain of animals. A clinical feature of vascular accident is the sudden development of neurological symptoms, followed by stabilization and later regression of neurological deficits, except in fatal cases. It may occur due to multiple factors, with systemic arterial hypertension (SAH) being one of the main underlying causes in felines. SAH is a multifactorial condition, characterized by a persistent increase in blood pressure levels, and among its etiologies, hyperthyroidism and chronic kidney

disease (CKD) stand out as major contributing factors.The aim of this report is to describe a case of a feline with neurological changes compatible with encephalic EVA, SAH, and hyperthyroidism. A domestic, indoor, neutered male cat, 21 years old, negative FIV and FeLV status, was admitted to the Veterinary Hospital of the Federal Rural University of Rio de Janeiro. Three days prior to clinical evaluation, the animal presented limb spasticity associated with body stretching, followed by paraplegia and constipation. On physical examination, the animal showed a body condition score of 2/5, normocolored mucous membranes, 5% dehydration, capillary refill time of 2 seconds, HR 200 bpm, RR 40 rpm, blood glucose of the left pelvic limb (LPL) 83 mg/dL and jugular 87 mg/dL, strong pulse in pelvic limbs, systemic blood pressure (SBP) 280 mmHg, and tortuous vessels on fundoscopic evaluation. Additionally, cerebellar ataxia, a wide-based stance, preserved proprioception in all limbs, and normal cranial nerve reflexes were observed. Hematologic evaluation revealed increased AST (61 U/L; reference range: 10–50 U/L), alkaline phosphatase (54 U/L; reference range: 0–50 U/L), and urea (63.9 mg/dL; reference range: 20–45 mg/dL). Creatinine, ALT, and complete blood count showed no abnormalities. Urinalysis and sedimentoscopy demonstrated a specific gravity of 1.020, hematuria, proteinuria, and bacteriuria. Based on physical examination findings, the main differential diagnoses considered were EVA and central nervous system neoplasms. Given the animal's hypertensive profile and the attenuation of clinical signs since the first day of onset, EVA was considered the most probable diagnosis. Treatment for SAH was initiated with amlodipine (0.625 mg/cat, PO, SID, until further recommendations). By the third day of treatment, the patient showed improvement in ambulation. A blood sample was collected for hormonal analysis of total T4 by radioimmunoassay (7.41 µg/dL; reference range: 1.2 - 4.0 µg/dL) and TSH by chemiluminescence (< 0.03 ng/mL; reference range: 0.03 - 0.3 ng/mL), confirming hyperthyroidism. Treatment with thiamazole was then initiated (1.25 mg/cat, PO, BID, until further recommendations). SAH is considered one of the main risk factors for EVA, therefore, maintaining SBP within normal limits is essential. Hyperthyroidism is the most common endocrinopathy in middle-aged to elderly felines and can significantly contribute to elevated SBP. Although advanced imaging exams could not be performed for definitive confirmation of EVA, the condition was strongly suspected due to the course of the disease and the associated risk factors. Thus, although ischemic EVA in felines is poorly described in the literature—highlighting the relevance of this case report—the association of

these comorbidities represents an important and potentially concerning clinical aspect for the animal’s clinical progression.

Palavras-chave: neuropathy; endocrinopathy; nephropathy; feline medicine.