RESUMO SIMPLES - HELMINTOLOGIA: SISTEMÁTICA, EPIDEMIOLOGIA E CONTROLE

INFECTION BY DIOCTOPHYMA RENALE IN A DOG (CANIS LUPUS FAMILIARIAS) FROM SEROPÉDICA, RIO DE JANEIRO, BRAZIL: CASE REPORT

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Dioctophyma renale, commonly known as the giant kidney worm, is a nematode with a heteroxenous life cycle that affects domestic and wild carnivores. Aquatic annelids act as intermediate hosts, while fish and amphibians may serve as paratenic hosts, facilitating infection of the definitive host through ingestion of raw or undercooked contaminated tissues. It is a zoonotic parasite; although human cases are rare, they have been reported. The life cycle involves the

development of infective larvae in aquatic environments, where the definitive host acquires the infection after ingesting parasitized intermediate or paratenic hosts. In dogs, adult worms are located in the renal pelvis and cause destruction of the renal parenchyma, leading to loss of kidney function. The right kidney is more commonly affected, but migration to the abdominal and thoracic cavities, ureters, urinary bladder, subcutaneous tissues, and other sites can occur. Infections are usually asymptomatic. This report describes a case of Dioctophyma renale infection in an adult, mixed-breed male dog from the city of Seropédica, Rio de Janeiro, Brazil. The animal had hunting habits and lived in a yard without nearby rivers or lakes. It presented with anemia, inappetence, vomiting, weight loss, and dysuria. The main clinical suspicion, according to the attending veterinarian, was renal calculi. An ultrasound examination was requested, but the animal died before it could be performed. A necropsy revealed marked enlargement of both kidneys, and the parasite was found in the right kidney, causing complete destruction of the renal parenchyma. The nematode, approximately 60 cm long, reddish in color, and cylindrical in shape, was identified through morphological assessment. This case highlights that delays in seeking veterinary care and establishing an accurate diagnosis can be critical for the animals outcome. It also emphasizes that evaluating the environmental conditions in which the animal lives can contribute to diagnostic clarification. In cases of renal disease of unknown origin, imaging examinations are essential, and differential diagnoses should include conditions such as renal dioctophymosis and renal dirofilariasis, to ensure greater diagnostic accuracy and patient safety.

Palavras-chave: canine helminth infection; dioctophyma renale; nematode infection; veterinary parasitology.