RESUMO SIMPLES - OUTRAS ÁREAS TEMÁTICAS

GRANULOMATOUS PNEUMONIA DUE TO ASPERGILLUS FUMIGATUS IN A CURL-CRESTED JAY (CYANOCORAX CRISTATELLUS)

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Infection with the fungus Aspergillus spp. is among the most common respiratory diseases in birds kept under human care. The disease usually occurs opportunistically, and the chronic pulmonary manifestation is characterized by granulomatous reactions with intralesional fungal hyphae, which can lead to severe respiratory compromise and death. Despite the importance of aspergillosis in avian medicine, there are few reports in Brazilian bird species, particularly passerines. Herein, we report the pathological findings of a chronic pulmonary aspergillosis in a Curl-crested Jay (Cyanocorax

cristatellus). An adult Cyanocorax cristatellus from the Wildlife Screening Center in Seropédica, Rio de Janeiro, presented with a humeral fracture in the right limb, for which amputation was indicated. The animal was submitted to a surgical fracture reduction, but died during the procedure. A necropsy was performed, and the lungs were collected for fungal culture and sampled in 10% neutral-buffered formalin and forwarded to histopathological examination. Paraffin-embedded lung tissue was submitted to polymerase chain reaction (PCR). Grossly, the lungs exhibited multifocal, irregular, white-to-tan firm nodules. Microscopically, approximately 60% of the pulmonary parenchyma was replaced by multifocal to coalescing, well-demarcated, non-encapsulated granulomatous areas composed of central amorphous eosinophilic material with abundant pyknotic debris (necrosis) and fibrin, surrounded by numerous foreign-body–type multinucleated giant cells, epithelioid macrophages, lymphocytes, and plasma cells. Within the necrotic centers, multiple nonstained and slightly basophilic septate tubular structures, with parallel 5–8 μm walls and acute-angle branching (fungal hyphae) were observed. Adjacent airspaces were replaced by a moderate amount of eosinophilic amorphous material (edema), and the perivascular regions exhibited moderate infiltration by macrophages, lymphocytes, plasma cells, and occasional heterophils. The fungal culture and PCR detected Aspergillus fumigatus in the lung samples. Aspergillus fumigatus should be included as a cause of granulomatous pneumonia in passerines, especially in the Curl-crested Jay (Cyanocorax cristatellus). This case highlights the relevance of early diagnostic investigation and preventive measures for fungal respiratory diseases in captive and rehabilitating wild birds.

Palavras-chave: avian pathology; fungal infection; granulomas; histopathology; mycosis.