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Pulmonary Lymphomatoid Granulomatosis in a Cocker Spaniel

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Introduction: Lymphomatoid granulomatosis (LYG) is rare disease as infiltrating the angiocentric and the angiodestructive neoplastic proliferation of T lymphocytes commonly involving the lungs

Materials and methods: A 10-month-old, intact female American Cocker spaniel was referred to the Veterinary Medical Teaching Hospital of Konkuk University due to nonproductive, dry coughing, serous nasal discharge, and dyspnea.

Results: Thoracic radiography and Computed tomography (CT) showed totally consolidation of left lung lobes. For 3 months after treatment using prednisolone and antibiotics, clinical signs were temporary improved and therapy was gradually ceased. 3 months after stopping therapy, she was relapsed and died due to severe respiratory distress and dyspnea. On histopathologic examination, thecranial lung mass was composed of a diffuse infiltrate consisting of a mixture of atypical small lymphocytes, macrophages, and atypical lymphoreticular cells, which showed angiocentric and angiodestructive features. Based on these findings, pulmonary lymphomatoid granulomatosis (PLG) was definitively diagnosed. Immunohistochemical study of the infiltrates demonstrated a predominantly T cell infiltrate and clusters of large and atypical lymphocytes that stained for B cell marker such as CD79a and CD20.

Clinical relevance: We conclude that PLG is a mainly pan-T-cell neoplasm and that it has also a strong association with B cell phenotype. This result provides the first evidence that PLG associated with a form of B-cell.

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