

Clinical and MRI Findings of Idiopathic Aplastic Pancytopenia in a Dog Treated with Cyclosporine and Azathioprine

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Signalment: An 8-year-old intact female miniature pinscher dog was referred with a 1 month history of lethargy, fever, inappetence, weight loss, and pancytopenia that had not responded to steroid therapy.

Results: Bone marrow aspiration and biopsy showed hypocellular marrow cavity filled with fat and no hematopoietic cells present. On T1-weighted magnetic resonance image (MRI), the metaphyseal region of femur of the patient had a high signal intensity, while that of normal dog had a low signal intensity. These findings were consistent with fatty marrow. Reported underlying causes of aplastic pancytopenia including drugs, radiation, travel history, infectious diseases, and estrogen exposure were excluded. The patient was diagnosed as having idiopathic aplastic pancytopenia and was successfully treated with immunosuppressive therapy using cyclosporine(CyA) and azathioprine.

Clinical relevance: This case suggests that intensive immunosuppressive therapy with CyA and azathioprine might be to a useful strategy for idiopathic aplastic pancytopenia in dogs. Furthermore, the present study has identified the MRI features of the bone marrow in a dog with idiopathic aplastic pancytopenia.

Key words: cyclosporine, dog, idiopathic aplastic pancytopenia, MRI

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