

Juvenile Onset Type 1 Immune-mediated Polyarthriti in a Shih-tzu Dog

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Introduction: Idiopathic, nonerosive, noninfectious arthritis was first reported in the mid 1970s as a disease of canine joints without obvious etiology. The condition is now referred to as canine idiopathic immune-mediated polyarthriti (IMPA).

Materials and methods: A 2-month-old female Shih-tzu dog was referred because of exercise intolerance, lethargy, elbow and stifle joint swelling. Physical examination, complete blood counts, serum-chemistry, radiography, synovial fluid analysis, antinuclear antibody test, and rheumatoid factor measurement were initiated.

Results: On radiographic findings, soft tissue swelling of elbow and stifle joints without erosiveness were founded. The resultsof synovial fluid analysis revealed severe neutrophilic pleocytosis (nondegenerative), decreased viscosity, increased turbidity, positive on mucin-clot test, and negative on bacterial culture. The results of antinuclear antibody test and rheumatoid factor measurement were negative and below 1:40, respectively. Based on all tests, we diagnosed this case to juvenile onset type 1 immune-mediated polyarthriti. Azathioprine was then administered and clinical signs improved gradually.

Clinical relevance: This report describes the clinical findings, imaging characteristics, synovial fluid findings, and other laboratory results of IMPA and successful management with azathioprine therapy.

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