Diagnose of Renal Dysplasia in a Shih-Tzu Dog : Histopathology of Renal Biopsy and Morphologic Findings with Laparoscopy

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Introduction: Renal dysplasia refers to disorganized development resulting from arrested or anomalous cellular processes. In several breeds (e.g., Lhasa apso, Shih Tzu, standard poodles, soft-coated Wheaten terriers) has been described as dysplasia.

Materials and methods: A 2-year-old male shih-tzu dog was presented because of intermittent vomiting and weight loss for 1month. Physical examination, CBC/DC, standard serum chemistry, Ultrasonography, Radiography, and renal biopsy with laparoscopy were performed for diagnosis.

Results: The patient had terminaluremia as early as a few months of age, and laboratory findings were typical of renal failure. However, in histological findings of renal biopsy, juvenile glomeruli were typified particularly dysplasia of epithelial cells. Addition to, morphological findigs with laparoscopy were described as dysplasia presenting small sized lumpy-bumpy shaped bilateral kidney.

Clinical relevance: No finding is unique to this disease in clinical and laboratory characteristics compares to other renal failure. Therefore examiners concluded that the percentage of juvenile glomeruli was a valid marker of the disease and that wedge biopsy was a method of evaluating the renal status of dogs suspected of having renal dysplasia. The renal biopsy with laparoscopy was useful to diagnosis of renal dysplasia.

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