Juvenile Diabetes Mellitus in a Dog with Associated Alterations in the Exocrine Pancreas

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Signalment. A six-month-old, male crossbred dog, weighing 0.78 kg, was presented with growth retardation, intermittent diarrhea and acute bilateral immature cataracts.

Results. The laboratory findings was suggestive of the onset of juvenile diabetes mellitus (DM) concurrent with exocrine pancreatic insufficiency (EPI). Moreover, the DM was associated with a decreased level of serum insulin-like growth factor I . Although the low-dose dexamethasone suppression test results suggested hyperadrenocorticism, there were no pathological changes in the pituitary and adrenal glands. Histological examination revealed a markedly lower number of pancreatic islets and acinar cells.

Clinical relevance. The case reported here demonstrates that juvenile-onset DM can occur simultaneously with EPI and result in growth retardation, acute cataract formation, and misleading adrenal function test results. Routine TLI measurement may identify previously undiagnosed cases of EPI in dogs with juvenile-onset DM.

Key words: dog, exocrine pancreatic insufficiency, juvenile diabetes mellitus

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