Management of Canine Hypoadrenocorticism with Desoxycorticosterone Pivalate (DOCP)

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Fludrocortisone acetate initially has been used for mineralocorticoid replacement in dogs with primary hypoadrenocorticism which has glucocorticoid activity. Some dogs may have evidence of inadequate mineralocorticoid replacement while exhibiting signs of glucocorticoid excess. Changing from fludrocortisone to DOCP can considered when adverse effect and poor responses are found.

A 3 year-old, female cocker spaniel was presented to Medical Teaching Hospital of Seoul National University with depression, decreased activity, vomiting. Hypoadrenocorticism was diagnosed by characteristic electrolyte alteration (hyperkalemia, hyponatremia) and adrenocorticotropic hormone stimulation test results (pre ACTH: 0.01 mcg/dl, post ACTH: 0.01mcg/dl). Treatment started with 0.02mg/kg daily fludrocortisone acetate. The daily dose of fludrocortisone required increased significantly during initial treatment period (7 month). However, this dog hospitalized several times for reoccurrence of signs (weakness, anorexia, shivering) associated with abnormal electrolytes (high K and low Na). Initial treatment with oral fludrocortisone acetate was ineffective at maintaining serum electrolyte concentrations within normal limits (high K and low Na). Administration of DOCP at a dose of 2.2 mg/kg intramuscularly every 25 days over a 5-month period, successfully maintained normal serum sodium and potassium concentrations without any side effects.

In this case, DOCP is a suggested alternative treatment in uncontrolled dogs treated with fludrocortisone acetate.

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