Treatment of the Adrenal Crisis

Place IV catheter

Hemodynamically stable patient

Collect blood and urine samples for analysis (including basal cortisol) before administering fluids or medications and administer 5 µg/Kg of synthetic ACTH IV

Start fluid therapy with crystalloid solution assessing maintenance, % dehydration and additional losses

1 hour after synthetic ACTH administration take the second blood sample for post ACTH cortisol measurement

Patient in hypovolemic shock

Up to 90 mL/kg of crystalloid solution (NaCl 0.9% or lactated Ringer's solution) given as 20 to 30 mL/kg boluses (over approximately 20 minutes) until the animal is hemodynamically stable

If the patient is hemodynamically unstable, administer one dose of dexamethasone (0.1 to 0.2 mg/kg IV)

Give corticosteroids:

Hydrocortisone at constant rate infusion of 0.625 mg/kg/h
OR
Prednisolone sodium succinate 2 mg/kg IV initially, and then 0.5 mg/kg IV q12h
OR
Dexamethasone 0.1-0.2 mg/kg IV and then 0.05-0.1 mg/kg q2-6h

After the confirmation of hypoadrenocorticism start with DOCP SC and prednisolone PO
OR fludrocortisone acetate 5-10 µg/kg PO q12h and prednisolone PO

Monitoring:

- Blood electrolytes (q 4-12h)
- Blood glucose
- Acid base status
- Blood pressure
- Urine output
- ECG (if hyperkalemia)

If hyperkalemia is severe (>7 mEq/L and/or bradycardia or other ECG abnormalities):

- Slow administration of 10% calcium gluconate (0.5 mL/kg) to protect myocardium from effects of hyperkalemia
- Intravenous administration of dextrose (1 to 2 g/unit of insulin) and regular insulin (0.2 U/kg) decreases the hyperkalemia by driving potassium intracellularly
- Correction of metabolic acidosis will also promote intracellular movement of potassium

If hypoglycemia is present:

- 50% dextrose solution should be added to the IV fluids to produce 5% dextrose solution

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Canine Hypoadrenocorticism:
Treatment with DOCP and Monitoring

Day 0 → **Inject DOCP SC** + **Prednisolone 0.1-0.2 mg/kg/day* PO**

Day 10 post injection

Na^+	High	Normal	Low
	and/or	and/or	and/or
K^+	Low	Normal	High

→ See guidance note for information on lack of expected efficacy

Approximately day 28 post injection

Na^+	Normal	High	Low	Low	High	Normal
	and	and/or	and/or	and/or	and/or	and
K^+	Normal	Low	High	High	Low	Normal

- Administer DOCP at a 20% lower dosage**
- Do not inject DOCP. Check electrolytes every 5-7 days until normalized. Then inject DOCP at a 20% lower dosage**
- Inject DOCP at a 20% lower dose and shorten the interval to 21 days **
- Administer DOCP at a 20% higher dosage**
- Administer DOCP at the same dose
- Electrolytes normal after both 10 and ~28 days: continue to give DOCP every ~28 days and recheck electrolytes before injection in 4 months

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*In the first week after the diagnosis, relatively high dosages should be used, e.g., 1 mg/kg/day PO; the dose should then be gradually tapered up to 0.1-0.2 mg/kg/day

**Then reevaluate electrolytes at 10 days and just before the next dose

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