

CANINE LOW DOSE DEXAMETHASONE SUPPRESSION TEST

SAMPLE REQUIRED:

Serum (0.5 mL) or clotted blood (1.5 mL)

BLOOD TUBE REQUIRED:

Gel (gold top) or plain (red top) tubes.

Indications

To assist in the diagnosis of hyperadrenocorticism (Cushing's syndrome) in dogs. If results of pituitary - adrenal testing confirm hyperadrenocorticism, the LDDST results can also be used as an aid in discriminating between pituitary and adrenal dependant hyperadrenocorticism.

Protocol

- If glucocorticoids have been administered recently, refer to Notes below
- Maintain the dog in a stress free environment
- 8.00 am: Collect a resting blood sample and label it with patient details and '0 hr'
- 8.00 am: Administer dexamethasone sodium phosphate at 0.01 mg/kg IV
- 12.00 pm: Collect a 4-hour post-dexamethasone blood sample and label it with patient details and '4 hr'
- 4.00 pm: Collect an 8-hour post-dexamethasone blood sample and label it '8 hr'
- Store samples at 4°C and submit all three samples together to the laboratory. If transport to the laboratory will be delayed (> 12 hours), the samples should be centrifuged and the serum separated.
- On the laboratory submission form, list samples as well as collection intervals.

Notes

- The time of day is not critical but serves as a guide.
- Specific testing for hyperadrenocorticism should not be performed in unwell or significantly stressed animals, which may yield false positive results in adrenal function tests. In potentially hyperadrenocorticotoid dogs with significant intercurrent disease such as diabetic ketoacidosis or pancreatitis, adrenal function testing should be delayed until intercurrent disease is controlled.
- Any form of corticosteroid therapy may interfere with adrenal function tests, by (a) cross-reacting in the cortisol assay (**except for** dexamethasone), or (b) affecting the pituitary/adrenal axis via suppression of ACTH production. As a guide, the minimum periods for which corticosteroid therapy should be withheld before LDDST tests are:

Injectable (short acting)	7 days (48 hr if dexamethasone)
Oral	2 weeks
Topical	2 weeks
Injectable (depot)	2 months