Cushing's Syndrome

A simple guide to diagnosis



Step 1 - Look

Cushing's is most common in middle-aged to older patients. Pituitary-dependant hypercortisolism (PDH) is most common in small terrier-type breeds, adrenal-dependent hypercortisolism (ADH) is more common in larger dogs. Regardless of the underlying cause, the clinical signs are the same.



Remember, dogs are being diagnosed increasingly earlier in the disease process and often don't display all the 'P' signs at initial presentation. Any combination of symptoms could indicate disease.

Step 2 - Investigate

If signalment and clinical signs raise suspicion of Cushing's syndrome, the next step is to undertake routine first-line investigations. The table below describes the most common findings:

Haematology		Biochemistry		Urinalysis	
	% cases ⁱ		% cases ⁱⁱ		% cases ⁱⁱ
Stress Leukogram which includes Lymphopenia Eosinopenia	80 80	Increased ALKP (can be well in excess of 1000 IU/L) Hyperlipidaemia Increased ALT (often mild to moderate - <400 IU/L)	85-95 50-90 50-80	USG <1.020	85

Step 3 - Confirm

Once routine diagnostics have revealed non-specific indicators of disease, the next step is to use specific diagnostic testing to confirm Cushing's syndrome.

Low Dose Dexamethasone Suppression Test (LDDST)

The 2012 ACVIM consensus statementⁱⁱⁱ considers the LDDST to be the screening test of choice for Cushing's syndrome, and it is the best test to use where your suspicion of Cushing's is high. This test may produce a false positive result, therefore you want to be sure that where a positive result is gained, it is due to true Cushing's syndrome, rather than another non-adrenal illness. Where a negative result is gained, you can be very confident that the dog does not have Cushing's.

ACTH Stimulation Test (ACTHST)

The ACTHST is best used where there is known concurrent disease, or where Cushing's may be present, but there are other possible differentials high on the list.

The ACTHST is unlikely to give a false positive result, but equally it can provide false negative values. Where a negative result is gained, further investigations may still be warranted as this test can miss truly Cushingoid dogs.

Supporting you

Dechra provides you with an extensive range of resources to support you with diagnosing, treating and monitoring dogs with Cushing's syndrome:



The Dechra Academy www.dechra.com/endocrineacademy



Diagnostic App www.diagnosingcushings.com











Practice support materials: www.dechra.com/endocrinology

In addition to supporting you we also provide an extensive range of resources to help support your clients following their pets diagnosis.



Ownersite www.canine-cushings.co.uk



Owner Brochure



Owner Logbook

Support for individual cases

Dedicated technical advisors to support you with the individual case

Local Telephone:

Email:

References

- Feldman and Nelson (Eds.) (2004) Canine and Feline Endocrinology and Reproduction (3rd ed.) Saunders Elsevier, St. Louis, Missouri 278
- ii Ettinger, S.J. and Peterman, E.C. (Eds.) (2010) rextbook of veterinary internal inequality (7010) Saturnoe's Elsevier, St. Louis, ivissouri. 1022-10.
- ii Behrend et al (2013) Diagnosis of Spontaneous Canine Hyperadrenocorticism: 2012 ACVIM Consensus Statement (Small Animal) JVIM 1-13

