

Confirming the diagnosis of hyperadrenocorticism (HAC)

No test for HAC has 100% diagnostic accuracy. The diagnostic value of all endocrine tests will be significantly enhanced by performing them only when clinical signs consistent with HAC are present in the patient. Three endocrine diagnostic tests are available, all with particular advantages and disadvantages:

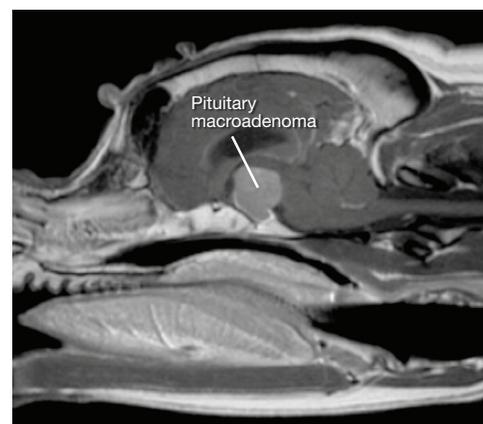
Test	Sensitivity & Specificity	Additional info
Urinary Cortisol to Creatinine Ratio (UCCR)	<ul style="list-style-type: none"> • Highest sensitivity of all three tests makes it a great screening test • Highest confidence in a negative test result • Lacks specificity • False positives are relatively common 	<ul style="list-style-type: none"> • To avoid false-positive results, urine samples should be collected at home at least two days after a visit to a veterinary clinic • Collect first urine sample from patient in the morning • Specificity and sensitivity can be increased when urine from 2-3 days is pooled and collectively tested and when the test is performed on dogs showing symptoms consistent with HAC
Low-Dose Dexamethasone Suppression	<ul style="list-style-type: none"> • High sensitivity • High confidence in a negative test result • Moderate specificity • False positives can occur 	<ul style="list-style-type: none"> • Long test (8 hours) • In some cases may differentiate between PDH and ADH • Considered the screening test of choice unless iatrogenic HAC is suspected
ACTH Stimulation	<ul style="list-style-type: none"> • Highest specificity of all three tests • Highest confidence in a positive test result • Lacks sensitivity • False negatives are relatively common 	<ul style="list-style-type: none"> • Relatively short test (1 hour) • Test of choice if there is a history of exogenous steroid therapy

For detailed information on performing and interpreting these tests, please contact Dechra Veterinary Technical Services at (866) 933-2472 or your reference laboratory consult line.

Differentiating between types

It is necessary to differentiate between Pituitary Dependent Hyperadrenocorticism (PDH) and Adrenal Dependent Hyperadrenocorticism (ADH) to provide a more accurate prognosis and enable the full range of possible treatments to be discussed with the dog's owner.

Discriminatory tests available to differentiate between PDH and ADH include the low- and high-dose dexamethasone suppression tests, ultrasonography, and advanced imaging such as MRI and CT and measurement of endogenous ACTH.



MRI image from a Boxer dog with a pituitary macroadenoma (image courtesy of Ruth Dennis, The Animal Health Trust, UK)

Diagnostic summary

A confident diagnosis requires consistent endocrine confirmatory test results in a dog with clinical signs compatible with hyperadrenocorticism.

Treatment and Monitoring of Hyperadrenocorticism

