



# Urinary Cortisol: Creatinine Ratio (UCCR)

The UCCR is a useful screening test for canine hyperadrenocorticism as a low (normal) result makes Cushing's unlikely (approximately 90% sensitivity). It is useful in those cases where hyperadrenocorticism is unlikely but needs to be definitely excluded. The test has low specificity (there are a lot of false positives). Further tests are needed to confirm that a high result is due to hyperadrenocorticism. It is thought that the test has similar sensitivity and specificity in cats but there are few published reports.

The urinary cortisol: creatinine ratio may be used as a screening test on urinary samples collected at home by the owners. Patients with elevated UCCR may then be tested with the low dose dexamethasone test.

## Collection protocol:

- Collect a morning urine sample. To avoid false positive, stress should be minimised in the 24 hours prior to collection, and avoid testing unwell patients.
- Submit sample with a request for urinary cortisol and creatinine ratio.

## Test interpretation

- Ratio  $< 17.5 \times 10^6$  Cushing's is unlikely
- Ratio  $> 17.5 \times 10^6$  Cushing's may be present

Because the urine cortisol to creatinine ratio is performed on a single sample that can be collected at home or in clinic, without need for administration of drugs (e.g., ACTH, dexamethasone), it can be a useful and cost-efficient way to direct further investigation.

UCCR  $> 30$  may reflect hyperadrenocorticism (Cushing's disease), stress, or non-adrenal illness. Additional testing (for example, a low dose dexamethasone suppression test) would be required to confirm a diagnosis of hyperadrenocorticism.

If clinical suspicion of hyperadrenocorticism is high but UCCR is  $< 30$ , additional screening tests are still recommended. A UCCR below this threshold alone does not rule out the possibility of hyperadrenocorticism.



**Species:**  
Canine & feline



**Specimen:**  
Urine



**Container:**  
Sterile pot