



Canine Hyperadrenocorticism (Cushings Disease)

- 'Excessive glucocorticoid (cortisol) production'
- Cortisol (endogenous steroid) is produced in the adrenal glands (located next to each kidney)
- Cortisol production is controlled by the production of another hormone ACTH which is produced from the pituitary gland (located in the brain)

Pituitary gland produces ACTH – ACTH stimulates adrenal gland to release cortisol

Reasons for excess cortisol production

1. Excessive ACTH production from brain
 - Due to development of a pituitary tumour (adenoma or carcinoma)
 - Causes over stimulation of the adrenal glands causing them to grow larger due to the increased workload
 - ~85-90% of cases
2. Excessive cortisol production independent of ACTH production
 - Due to development of an adrenal tumour (adenoma or carcinoma)
 - ~10-15% cases
 - Of which ~50% of adrenal tumours are malignant (carcinoma)
3. Administration of synthetic steroids



- Most dogs are around 10 years of age when they develop this condition
- Clinical signs (symptoms):
 - Excessive urination and drinking (known as polyuria/polydipsia)
 - Enlarged abdomen ('pot bellied' appearance)
 - Muscle weakness
 - Exercise intolerance / lethargy
 - Panting
 - Skin infections (known as pyodermas)
 - Loss of hair, usually symmetrical on flanks
 - Excessive eating (known as polyphagia)
- Hyperadrenocorticism is suspected on clinical signs and confirmed by performing screening bloods tests and stimulation tests i.e. ACTH stim test or Low Dose Dexamethasone Suppression test
- Treatment:
 - Trilostane (Vetoryl tablets) – blocks enzymes that produce cortisol
 - Repeat stimulation tests are required periodically at the start of treatment to ensure the correct dose is found