Diagnosis of feline hyperthyroidism

Hyperthyroidism suspected based on history, physical examination findings +/- supportive changes on routine biochemistry

Measure Total T4

Total T4 above reference interval

Total T4 within reference interval

Approximately 10% of hyperthyroid cats have serum Total T4 concentration within the reference interval due to:

i) Fluctuation from above to within reference interval in early/mildly affected cases
ii) T4 suppression due to concurrent non-thyroidal illness (NTI)

If still suspect hyperthyroidism…

EITHER
If suspect early or mildly affected case: Retest Total T4 2 - 4 weeks later, or when more overt clinical signs develop

If suspect NTI: Identify and treat (if possible) before retesting Total T4

OR
Measure Free T4 and Total T4 in same blood sample

Free T4 above reference interval

Free T4 within reference interval

Total T4 in upper half of reference interval

Total T4 in lower half of, or below, the reference interval

Hyperthyroidism confirmed

Hyperthyroidism likely

Hyperthyroidism unlikely
NTI likely
Up to 20% of sick euthyroid cats have elevated Free T4 concentrations

Hyperthyroidism unlikely

Consider NTI as cause of observed clinical signs e.g. gastrointestinal disease, neoplasia

If still suspect hyperthyroidism:

Consider measuring TSH concentration, using canine TSH assay
(contact your diagnostic laboratory or Dechra Veterinary Products for further information)

OR

Consider referral for thyroid scintigraphy