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

Hyperthyroidism confirmed

Total T4 in upper half of reference interval

Hyperthyroidism likely

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

Hyperthyroidism unlikely

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…

Free T4 above reference interval

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

Total T4 within reference interval

Hyperthyroidism unlikely

NTI likely

Up to 20% of sick euthyroid cats have elevated Free T4 concentrations

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)

Consider referral for thyroid scintigraphy

Free T4 within reference interval

OR

Hyperthyroidism unlikely

Total T4 in upper half of reference interval

Hyperthyroidism likely

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

Hyperthyroidism unlikely

NTI likely

Up to 20% of sick euthyroid cats have elevated Free T4 concentrations

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

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Consider referral for thyroid scintigraphy
In a foreign field study with 26 cats using a starting dose of 5 mg twice daily (twice the recommended starting dose), one cat was withdrawn due to lethargy, vomiting and facial excoriations. Marked thyroid hyperplasia was observed in 2 cats; the platelet count returned to normal levels when FELIMAZOLE Coated Tablets were dosed at 2.5 mg twice daily and 11 of 12 cats were euthanized within 12 days of starting FELIMAZOLE Coated Tablets at a dose of 5 mg twice daily. Both cats were reported with lethargy, vomiting, anorexia, and bloody diarrhea; one cat also had pallor.

In a second foreign field study with 78 cats using a starting dose of 2.5 mg twice daily, 4 cats were withdrawn due to the suspected adverse reaction of vomiting, anorexia, gastritis, hyperplasia and darkening. Some treated males had delayed maturation of the testes.

INDICATION: FELIMAZOLE Tablets (methimazole) are indicated for the treatment of hyperthyroidism in cats.

DOSAGE AND ADMINISTRATION: The starting dose of FELIMAZOLE Coated Tablets is 2.5 mg administered every 12 hours. Following 3 weeks of treatment, the dose should be titrated to effect based on individual serum total T4 (TT4) levels and clinical response. Dose adjustments should be made in 2.5 mg increments. The maximum total dosage is 20 mg per day divided, not to exceed 10 mg as a single administration.

Hematology, biochemistry, and TT4 should be evaluated prior to initiating treatment and monitored at 4 to 6 weeks after initiation of treatment. Bloodwork should be monitored every 3 months and the dose adjusted as necessary. Cats receiving doses greater than 10 mg per day should be monitored more frequently.

CONTRAINDICATIONS: Do not use in cats with hypersensitivity to methimazole, carbimazole or the excipient, polyethylene glycol.

Do not use in cats with primary liver disease or renal failure.

Do not use in cats with autoimmune disease. See ADVERSE REACTIONS.

Do not use in cats with hematological disorders (such as anemia, neutropenia, lymphopenia, or thrombocytopenia) or coagulopathy. See ADVERSE REACTIONS.

Do not use in pregnant or lactating queens. Laboratory studies in rats and mice have shown evidence of teratogenic and embryotoxic effects of methimazole.

WARNINGS: Methimazole has anti-vitamin K activity and may induce bleeding diathesis without evidence of thrombocytopenia. See ADVERSE REACTIONS.


Wash hands with soap and water after administration to avoid exposure to drug. Do not break or crush tablets. Wear protective gloves to prevent direct contact with litter, feces, urine, or vomit of treated cats.

Methimazole is a human teratogen and crosses the placenta concentrating in the fetal thyroid gland. There is also a high rate of transfer into breast milk. Pregnant women or women who may become pregnant, and nursing mothers should wear gloves when handling tablets, litter or bodily fluids of treated cats.

Methimazole may cause vomiting, gastric distress, headache, fever, arthralgia, pruritus, and pancytopenia. In the event of accidental ingestion/overdose, seek medical advice immediately and show the product label to the physician.

PRECAUTIONS: Use of FELIMAZOLE Coated Tablets in cats with renal dysfunction should be carefully evaluated. Renal function may be impaired with decreased glomerular filtration rate and a decline in renal function, unmasking the presence of underlying renal disease. Due to potentially serious adverse reactions such as hepatitis, immune-mediated anemia, thrombocytopenia, and agranulocytosis, cats on methimazole therapy should be monitored closely for any sign of illness including anorexia, vomiting, head/facial pruritis or edema, depression/lethargy, weight loss, anemia, skin lesions, diarrhea, fever, or lymphadenopathy. If a cat becomes ill while on FELIMAZOLE Coated Tablets, the drug should be stopped and appropriate hematological and biochemical testing should be done (see ANIMAL SAFETY and POST-APPROVAL EXPERIENCE).

Anticoagulants may be potentiated by the anti-vitamin K activity of FELIMAZOLE Coated Tablets. Concurrent use of phenobarbital may reduce the clinical effectiveness of FELIMAZOLE Coated Tablets. A reduction in dose of certain drugs (β-adrenergic blocking agents, digitalis glycosides, and theophylline) may be needed when the patient becomes euthyroid.

Methimazole is known to reduce the hepatic oxidation of benzimidazole antihelmintics (e.g. fenbendazole), leading to increased plasma concentration of these anthelmintics when administered concurrently. FELIMAZOLE Coated Tablets caused delayed maturation of the testes in young male cats in the 12-week safety study. See ANIMAL SAFETY. The safety of FELIMAZOLE Coated Tablets has not been evaluated in male cats intended for breeding.

ADVERSE REACTIONS: In a US field study with 113 cats, the most common adverse reactions included change in food consumption (increase or decrease), lethargy, vomiting, diarrhea/loose stool, skin lesions, and abnormal vocalization. Three cats were withdrawn early from the study, one due to unmasking of latent renal disease and two due to the development of skin lesions. Over the course of the study, there was a decreasing trend in the mean counts of red blood cells, lymphocytes, neutrophils and monocytes; however, means remained within or near normal ranges for the testing laboratory.

In the extended use phase of the US field study with 101 cats, the most common adverse reactions reported in the study above (lethargy, anorexia) were also observed. Additional signs occurring more frequently in the long-term study were: depression/withdrawn behavior, weight loss, haircoat abnormalities, increased blood urea nitrogen (BUN), weakness, agitation and diarrhea. Most of the adverse reactions reported were mild and transient.

Serum chemistry and hematology results in the extended use study were consistent with the trends noted in the field study. The mean alanine transaminase (ALT) was above the reference range at the first two quarterly visits, but within the normal reference range (10-100 U/L) the next two quarterly visits.

Mean lymphocyte counts decreased consistently during the study period, to slightly below the reference range (1200-8000 cells/μL) at the fourth quarterly visit. Sixteen cats experienced elevated antinuclear antibody (ANA) titers at one or more points during long-term therapy with FELIMAZOLE Coated Tablets, but the significance was not determined. Eighteen cats died or were euthanized during the extended use study, four of which may have been related to FELIMAZOLE Coated Tablets due to the unmasking/acceleration of chronic renal failure. See PRECAUTIONS.