

# Abstract

## Journal of the American Veterinary Medical Association

April 1, 2003, Vol. 222, No. 7, Pages 954-958

doi: 10.2460/javma.2003.222.954

### **Efficacy and safety of once versus twice daily administration of methimazole in with hyperthyroidism**

**Objective**—To determine whether **once daily** administration of **methimazole** was as effective and safe as **twice daily** administration in cats with hyperthyroidism.

**Design**—Randomized, nonblinded, clinical trial.

**Animals**—40 cats with newly diagnosed hyperthyroidism.

**Procedure** – cats were randomly assigned to receive 5 mg of **methimazole**, PO, **once daily** (n = 25) or 2.5 mg of **methimazole**, PO, **twice daily** (15). A complete physical examination, including measurement of body weight; CBC; serum biochemical analyses, including measurement of serum thyroxine concentration; and urinalysis were performed, and blood pressure was measured before and 2 and 4 weeks after initiation of treatment.

**Results**—Serum thyroxine concentration was significantly higher in given **methimazole once daily**, compared with cats given **methimazole twice daily**, 2 weeks (3.7 vs 2.0 µg/dL) and 4 weeks (3.2 vs 1.7 µg/dL) after initiation of treatment. In addition, the proportion of cats that were euthyroid after 2 weeks of treatment was lower for cats receiving **methimazole once daily** (54%) than for cats receiving **methimazole twice daily** (87%). Percentages of patients with adverse effects (primarily gastrointestinal tract upset and facial pruritus) were not significantly different between groups.

**Conclusions and Clinical Relevance**—Results suggest that **once daily** administration of **methimazole** was not as effective as **twice daily** administration in cats with hyperthyroidism and cannot be recommended for routine use. (*J Am Vet Med Assoc* 2003; 222:954–958)