

# capsules

## THE CURRENT LITERATURE IN BRIEF

### **Hypothyroidism: Defining Myxedema Coma in Dogs**

Hypothyroidism is a common endocrinopathy of dogs that can usually be successfully managed with oral levothyroxine supplementation, with IV levothyroxine reserved for patients with myxedema coma. This retrospective study evaluated the response to treatment and outcome of 7 hypothyroid dogs treated with IV levothyroxine. Of the 806 dogs treated from January 1, 1993, to March 1, 2004, only 7 received IV levothyroxine. Rottweilers (3 of the 7) seemed to be overrepresented. Five of the dogs had concurrent disease, 5 had altered mental status, and 4 had myxedema. Six of the dogs responded well to therapy and were sent home on oral therapy. Myxedema coma is rare in dogs but the diagnosis is complicated by the fact that, as in humans, dogs with myxedema coma often do not have myxedema and are rarely comatose. It is possible that dogs may develop acute hypothyroid crises that respond to IV levothyroxine but do not have myxedema or coma. Recognition of hypothyroid crisis may be increased by broadening the definition to include dogs that don't have myxedema or coma.

**COMMENTARY:** Although many of these dogs were very sick at the time of diagnosis, most responded dramatically to therapy and had a good prognosis. Abnormal neurologic findings were noted in 5 of the 7 dogs, reminding us to keep thyroid disease on the differential list for dogs presenting with such signs as mental dullness, decreased proprioception, stupor, ataxia, and facial paralysis.—*The Editors*

*Hypothyroid dogs treated with intravenous levothyroxine. Pullen WH, Hess RS. J VET INTERN MED 20:32-37, 2006.*