



**Figure 3-2** Alopecia of tail ("rat tail") in a 7-year-old Labrador Retriever with severe hypothyroidism.



**Figure 3-3** Bilaterally symmetrical truncal alopecia and hyperpigmentation in a hypothyroid dog.

## Neurologic

- ✓ Peripheral neuropathy is diagnosed in 5-10% of hypothyroid dogs.
- ✓ Generalized polyneuropathy is manifested as generalized weakness, ataxia, and hyporeflexia.
- ✓ Localized neuropathies occur with a similar frequency to the generalized form, with vestibular and facial nerve paralysis occurring most commonly.
- ✓ Megaesophagus has been diagnosed in hypothyroid dogs, but the relationship between these disorders is unclear.
- ✓ Central nervous system signs (cerebellar or central vestibular), including head tilt, paresis, circling, strabismus, nystagmus, facial nerve paralysis, and trigeminal nerve dysfunction have been noted in a small number of hypothyroid dogs.

## Cardiovascular

- ✓ Clinical signs of cardiac dysfunction are uncommon in hypothyroid dogs, but most probably have some degree of decreased myocardial function.
- ✓ Bradycardia is occasionally present (10-25%), and weak pulses or muffled heart sounds are also found.
- ✓ Electrocardiographic abnormalities including diminished R-wave amplitude (40-60%) and prolonged PR interval (10-20%) are common.
- ✓ Decreased myocardial contractility is sometimes present on echocardiography, but hypothyroidism only rarely causes reversible dilated cardiomyopathy and heart failure in the dog.

## Uncommon Clinical Signs

### Reproduction

- ✓ Female dogs with hypothyroidism may have reproductive abnormalities including infertility, prolonged anestrus, and short estrus.
- ✎ Fertility in male dogs is not significantly affected by prolonged hypothyroidism.
- ✓ Galactorrhea can occur in intact females weeks to months beyond the normal period of diestrus, appearing to be prolonged pseudopregnancy.

### Myxedema Stupor or Coma

- ✓ A very rare and life-threatening manifestation of hypothyroidism is myxedema coma.
- ♥ Hypothermia without shivering, severe depression progressing to coma, bradycardia, hypotension, non-pitting edema, and anorexia may be present.
- ✓ Hyponatremia, lipemia, hypercholesterolemia, hypoglycemia, and hypercapnea may be found on laboratory testing.

### Ocular Disorders

- ✓ A variety of ocular disorders attributed to hypothyroidism, including corneal lipid dystrophy, corneal ulcers, anterior uveitis, retinal disease, and keratoconjunctivitis sicca, are rarely, if ever, truly caused by hypothyroidism.