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## HYPERTHYROIDISM IN A LEOPARD GECKO (*Eublepharis macularius*) AND RADIOIODINE (I-131) TREATMENT

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### ABSTRACT

Hyperthyroidism was diagnosed in a 14-yr-old intact female leopard gecko, *Eublepharis macularius*, with clinical signs of anorexia, diarrhea and shedding more frequently than normal. Diagnostic workup was unremarkable except total thyroxine (T<sub>4</sub>), by radioimmunoassay, which was 20.59 nmol/L, which was elevated compared to normal snake (0.21-6.06 nmol/L) and iguana (2.97 – 4.65 nmol/L) values. A repeat T<sub>4</sub> 5 wk later was 64.35 nmol/L. Normal total T<sub>4</sub> values on 6 unrelated leopard geckos ranged from 6.05-19.31 nmol/L with a mean of 12.48 nmol/L. A spect computed tomographic (CT) technetium scan (1 mCi injected intracoelomically, scanned at 15 min) using a pin hole collimator revealed two discreet symmetric foci of activity in the ventral cervical soft tissue of a control leopard gecko, compared to a unilateral midline cervical mass, consistent with an enlarged thyroid gland, and no second focus of activity, in the patient. Spect CT findings were consistent with a unilateral thyroid gland enlargement resulting in negative feedback and suppression of the contralateral thyroid gland. Iodine-131 (0.1 mCi) was injected subcutaneously in the ventral neck, thyroid values at 1 mo (14.16 nmol/L), 3 mo (6.44 nmol/L) and 5 mo (12.61 nmol/L) were normal compared to other leopard geckos. Diarrhea resolved post-treatment; the gecko resumed feeding and gained weight.