



Small Animal Internal Medicine 2

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Chief Complaint

Louis is a 7 year old male neutered Sheltie with a chief complaint of bilateral truncal alopecia that developed over the past month.

Louis



History

- All vaccinations are up to date
- Louis started losing hair over his lateral abdomen and along his back about 1 month ago.
- The skin is not pruritic
- He also started gaining weight about the same time as the hair loss
- Louis doesn't seem to have the same energy as he did before.
- Chronic otitis externa

Physical Examination

- Dull/ listless
- Temperature 37.0 degrees C
- Heart Rate 100 bpm
- Respiratory Rate 15 per minute
- Bilateral hair loss – flank, lateral abdomen and tail
- In the alopecic areas the skin is thickened and hyperpigmented

Problem List

- Bilateral alopecia: flanks, lateral abdomen and tail
- Skin – hyperpigmented
- Weight gain
- Decreased energy
- Chronic otitis externa

Rule Outs

- List all the Possible Diagnoses
- *This list is your Rule Out list*

Rule Outs

- Hyperadrenocorticism
- Sex hormone-related dermatosis
- Growth hormone-responsive dermatosis
- Alopecia X
- Dermatophytosis

Plan

- CBC
- Blood Chemistry
- Complete Urinalysis
- Skin scraping

Findings

- RBC – 5.5 x 10³ (5.5-11.0)
- PCV – 40 (37-55)
- Phosphorus 5.2 mg/dl (3.1-7.5)
- Albumin 3.4 g/dl (2.4-4.0)
- Cholesterol 657 g/dl (110-320)
- BUN – 17 mg/dl (16-36)
- SCr. – 1.7 mg/dl (0.8-2.4)
- USG – 1.037 (> 1.035)
- T4 - 7 (10 – 40 mg/dl)

Interpretation of laboratory findings

- List all the abnormal findings and discuss a possible cause for each of them.
- RBC – 5.5×10^3 (5.5-11.0)
- PCV – 40 (37-55)
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Interpretation of laboratory findings

- All the laboratory findings are normal except:
- Cholesterol – high – usually high with hypothyroidism
- T4 – low - hypothyroidism

Possible Diagnosis?

- The Free T4 is low and the cholesterol is high.
- These test would seem to indicate what disease ?

Additional tests?

- The laboratory results seem to indicate Hypothyroidism .
- What additional test would you order to help you confirm a diagnosis of Hypothyroidism ?

Additional Test?

- TSH concentration: this test measures the level of Thyrotropin concentration:
- TSH – 1.5 (0.0-0.6)
- Thyrotropin concentrations are increased in most dogs with primary hypothyroidism. However; 25-40% of dogs with confirmed hypothyroidism have normal TSH levels – false negatives.

Final Diagnosis

- Hypothyroidism
- Etiology: Lymphocytic thyroiditis (immune mediated) or idiopathic thyroid atrophy.

Treatment Plan

- Levothyroxine is the treatment of choice

Prognosis

- Excellent

The End







































