

Katie and Nikki Uyehara.
Photos by: Steve Uyehara

Greyhounds Health and Wellness Quarterly

OHIO STATE COLLEGE OF VETERINARY MEDICINE

By Liliana Marin & Guillermo Couto

Katie Uyehara.

MISDIAGNOSIS IN GREYHOUNDS. PART 1

HYPOTHYROIDISM

Is a common slow progressing endocrinopathy (disease of an endocrine gland) in dogs. Hypothyroidism occurs as a consequence of inadequate secretion of thyroid hormones. There are some breeds with known predisposition including Pointer, English Setter, Boxer, Maltese, Beagle, American Pit Bull Terrier, Dalmatian, and Giant Schnauzer, among others. Most hypothyroid dogs are middle aged (4-10 years).

CLINICAL SIGNS

Most adult dogs develop problems with metabolism, the skin or the neuromuscular system. Identification of Hyperlipidemia (fatty blood), mild non-regenerative anemia (little or no new blood cell production), and high blood cholesterol on routine blood tests adds further evidence for hypothyroidism.

Clinical manifestations of hypothyroidism in the adult

METABOLIC <ul style="list-style-type: none"> •Lethargy •Mental dullness •Inactivity •Weight gain •Cold intolerance 	DERMATOLOGIC <ul style="list-style-type: none"> •Alopecia (hair loss) •Hyperpigmentation •Pyoderma (infection of the skin) •Otitis (Infection of the ear) 	NEUROMUSCULAR <ul style="list-style-type: none"> •Weakness •Knuckling •Facial nerve paralysis •Seizures •Circling 	HEMATOLOGIC <ul style="list-style-type: none"> •Anemia •Hyperlipidemia •Coagulopathy (clotting or bleeding disorder)
OCULAR <ul style="list-style-type: none"> •Corneal lipid (fatty) deposits 	CARDIOVASCULAR <ul style="list-style-type: none"> •Bradycardia/Cardiac arrhythmias (disorder of heartbeat) 	GASTROINTESTINAL <ul style="list-style-type: none"> •Diarrhea •Constipation 	REPRODUCTIVE <ul style="list-style-type: none"> •Estrual bleeding

Nelson, Couto. Small Animal Internal Medicine, in Small Animal Internal Medicine, 2003: Mosby, St. Louis)

CRITERIA OF DIAGNOSIS

The diagnosis of hypothyroidism can never be based exclusively on thyroid testing. The following list includes the different criteria for a correct diagnosis:

- ✓ Clinical signs
- ✓ Lower concentration of baseline serum total (T4)
- ✓ Lower concentration of serum free thyroxine (fT4)
- ✓ **HIGH** concentration of thyroid stimulating hormone (TSH)
- ✓ Hyperlipidemia
- ✓ High blood cholesterol

WHY GREYHOUNDS COULD BE MISDIAGNOSED???

1. Some clinical signs might match

- Lethargy
- Inactivity

Isn't that part of their personality?
Or should I say "Greyhoundality"

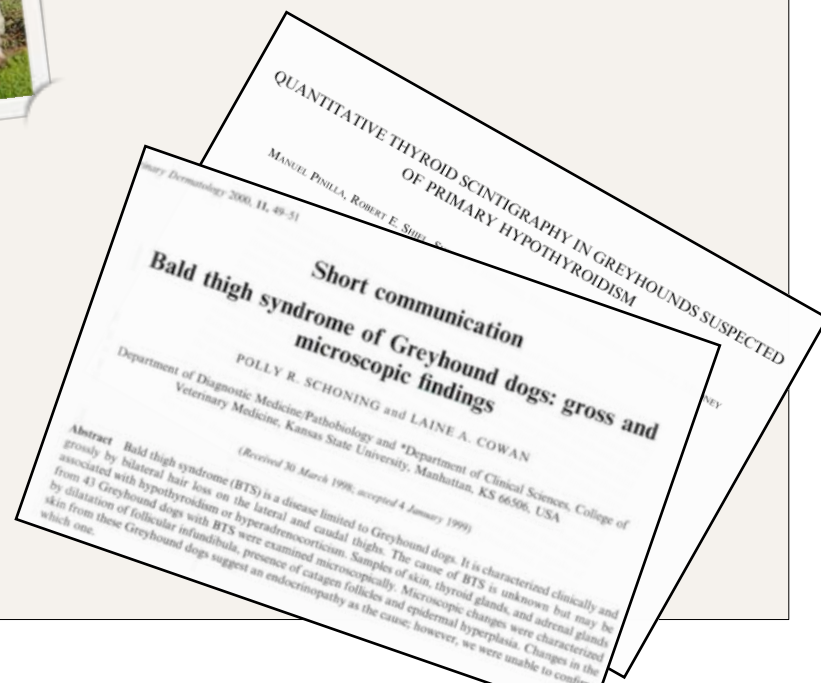


- Alopecia (hair loss)
It's very common to see Greyhounds with little or no hair on their thighs, this is called - bald thigh syndrome. The cause is unknown, but there are some articles that have shown that it is NOT linked to hypothyroidism.



- Cold intolerance

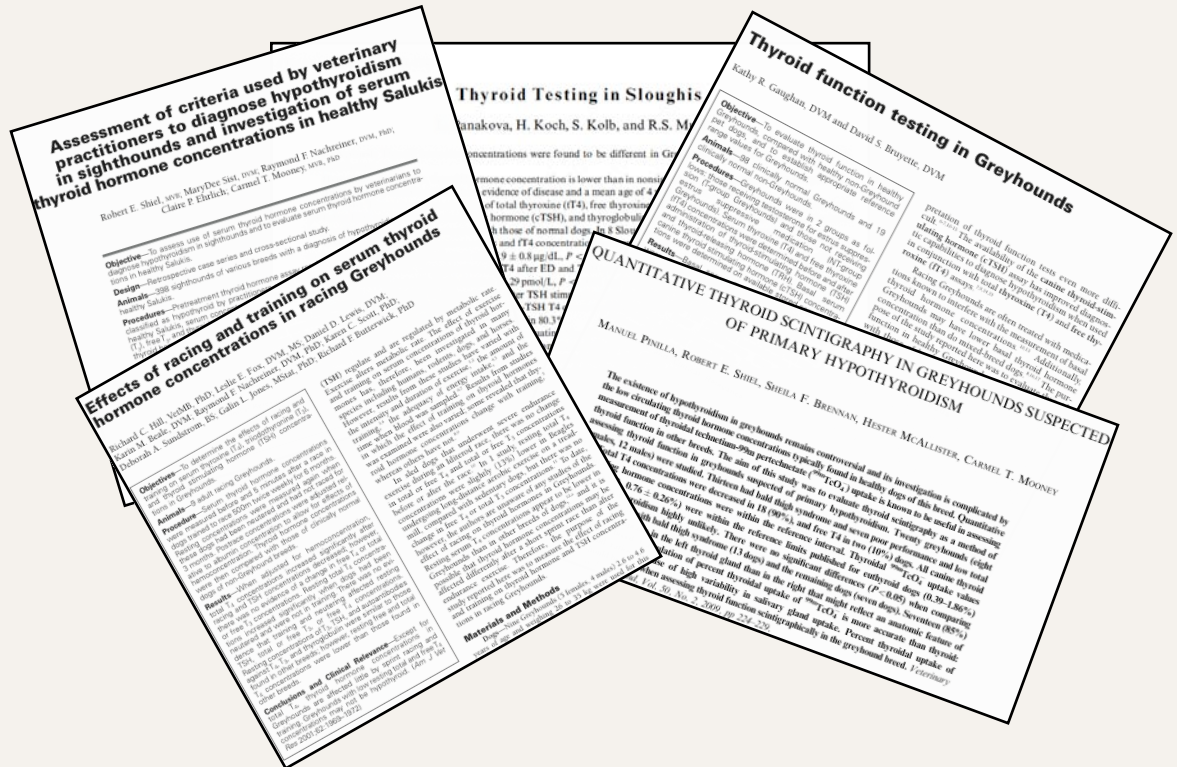
We all know that Greyhounds are pure muscle, and they have very little body fat. It is easily perceived that they are unable to keep warm.



GREYHOUNDS

LABORATORY FINDINGS

Most healthy and normal sighthounds (Greyhound, whippet, Saluki, Sloughis, Borzoi, etc) have lower concentrations of serum total (T4) and serum free thyroxine (fT4). There are several papers that have researched thyroid function in the breed. All these studies describe that sighthounds with low resting total and free T4 concentrations are not hypothyroid. This confirms that previously established canine reference ranges for T4 and fT4 are not appropriate for use in Sighthounds. Specific reference range values for basal serum T4 and fT4 concentrations should be applied when evaluating thyroid function in the breed.



HOW TO CONFIRM THE DIAGNOSIS

- ✓ HIGH concentration of thyroid stimulating hormone
- ✓ Hyperlipidemia

The only way to confirm the diagnosis is measuring TSH concentration. High levels of cholesterol also support the diagnosis. The veterinary laboratory at Michigan State University is the only lab that includes TSH in its thyroid panel.



There is no reason why any Greyhound should be supplemented with thyroid medicine, even less so for their hairless thighs or because they like to sleep or are shy. Over-supplementation of thyroid hormone can result in hypertension (high blood pressure) and other health problems such as vomiting, diarrhea, hyperactivity, tachycardia, tachypnea, and dyspnea. Underlying health problems include liver disease (where the drug is metabolized), seizure disorders and heart disease.

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WHAT TO DO IF YOUR GREYHOUND IS ON THYROID SUPPLEMENTATION

Talk to your vet about designing a plan to gradually wean off the thyroid supplementation. In general, lowering the dosage of thyroid supplementation by 25% each week, is a safe approach.

Supplementation must be discontinued for a period of 6 weeks before before re-testing.

WHAT'S NEW

MARCH				APRIL			
28	29	30	31	1	2	3	
4	5	6	7	8	9	10	
11							16 17
18							23 24
25	26	27	28	29	30	1	

MEMBERSHIP-BASED-WEBSITE
COMING SOON

Stay tuned!!!



- * C. Guillermo Couto, DVM
- * Cristina Iazbik, DVM
- * Liliana Marin, DVM
- * Sara Zaldivar, DVM
- * Dawn Hudson, RVT

Email address: greyosu@osu.edu

Direct Phone number: (614) 247-6757 and (614) 247-8490

WE DEPEND ON YOUR GENEROSITY!!

“Our mission of helping the Greyhounds is supported by your kindness”.

To make a donation to the Greyhound Health and Wellness Program please use the link below to the secure website for online giving, or contact Dr. Guillermo Couto (couto.1@osu.edu) or Danielle Ford (danielle.ford@cvm.osu.edu).

https://www.giveto.osu.edu/igive/OnlineGiving/fund_results.aspx?Source_Code=WA&Fund=310050

We thank you very much for your generous support so that we may continue our mission to help the Greyhounds.

The Ohio State University
Veterinary Teaching Hospital
601 Vernon L. Tharp Street.
Columbus, Ohio 43210
Companion Animal Ph: (614) 292-3551

