

High prevalence of

Canine autoimmune lymphocytic thyroiditis

in Giant Schnauzer & Hovawart dogs

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CLT

Canine Lymphocytic Thyroiditis

- Frequent
- Autoimmune
- Cannot be cured
- Complex
- Similar to Hashimoto's disease

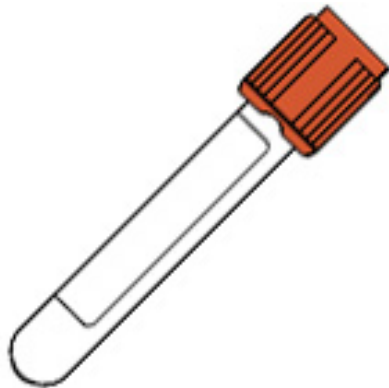


CLT

Biochemical symptoms

CLT is diagnosed based on:

- TSH-, thyroxine (fT4) and TgAA-levels
- clinical symptoms



	Stages of CLT			
	I	II	III	IV
TgAA	POS	POS	POS	NEG
TSH	normal	high	high	high
fT4	normal	normal	low	low
symptoms	no	no/yes	yes	yes



CLT

Clinical symptoms

Metabolic

weight gain, mental dullness, lethargy, etc.

Dermatologic

Dry hair and skin, thin coat, alopecia, seborrhea, etc.

Neuromuscular

Weakness, seizures, facial nerve paralysis

Reproductive

Weak or silent heats, prolonged bleeding, etc.

Behavior

aggressive

CLT

Background and aim

Background

- CLT is common and costly
- “late” symptoms

Aim

- Estimate prevalence of CLT
- Indicate earliest evidence of CLT
- Evaluate value of screening prior to breeding



Study design

Birth-cohort study:

3-4 and 6-7 yrs

Serum and blood

- 236 (105 + 131) Giant schnauzers
- 95 (47 + 48) Hovawarts

Info and clinical history

- general info, pedigree-info etc
- clinical status, nutritional facts, vaccination routines etc
- “follow-up” questionnaire

- Diagnostic analyses: TSH, TgAA and fT4

Inclusion criteria for cases and controls

Diagnostic characteristics	Case	Control
TgAA	POS	NEG
TSH	≥ 40 mU/l	≤ 25 mU/l
fT4	-	5-25 pmol/l
Age	-	≥ 7 years

CLT

Results

Breed		Prior diagnose		Elevated TgAA and/or TSH		In total	
		No. of dogs (%)		No. of dogs (%)			
Giant schnauzer	3-4 y	4	(3.1)	15	(11.8)	19	(14.5)
	6-7 y	13	(12.4)	7	(7.6)	20	(19.0)
Hovawart	3-4 y	0	(-)	5	(10.6)	5	(10.4)
	6-7y	3	(6.4)	4	(8.5)	7	(12.8)



CLT

Summary and conclusions

- GS and HW are CLT high-risk breeds
- high prevalence in young dogs
- serological and clinical symptoms not contemporary

Recommended screening of TSH, fT4 and TgAA in high risk breeds

- The optimal breeding tool: a genetic test!

The dogs, dog owners and veterinarians

The Swedish breed club of Giant schnauzer

The Swedish breed club of Hovawart

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