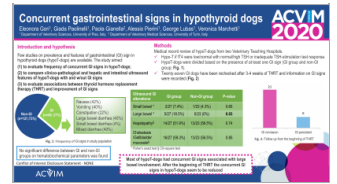


GI32 - Concurrent Gastrointestinal Signs in Hypothyroid Dogs



Research Abstract – ePoster Presenter(s)



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Few observations about prevalence and features of gastrointestinal (GI) signs in hypothyroid dogs (hypoT-dogs) are available. The study aimed (1) to evaluate concurrent GI signs in hypoT-dogs; (2) to analyze clinico-pathological and ultrasound features of hypoT-dogs with and w/out GI signs, and (3) to analyze GI signs follow-up after thyroid hormone replacement therapy (THRT). Medical records of hypoT-dogs from two Veterinary Teaching Hospitals were retrospectively reviewed. Dogs were classified as hypothyroid if TT4 or fT4 were low/normal with normal/high TSH or inadequate TSH-stimulation test response. Clinical history, GI signs (vomiting, diarrhea, constipation), hematobiochemical parameters and abdominal ultrasound were collected. HypoT-dogs were divided based on the presence of at least one GI sign (GI group and not-GI group). Twenty-seven GI dogs had 3-4 weeks recheck from the beginning of THRT and information on GI signs were recorded.

A total of 166 dogs were included (GI group, n=45, 27%; not-GI group, n=121, 73%). GI dogs showed nausea (42%), vomiting (40%), constipation (22%), large bowel diarrhea (40%), small bowel diarrhea (4%) and aspecific diarrhea (40%). No significant difference between GI and not-GI groups on hematobiochemical parameters was found. GI group had significantly higher frequency (20%) of large intestine involvement than not-GI group at the ultrasound (P = 0.03; Chi-square test). Twenty-one out of 27 GI dogs had a resolution of GI signs at recheck (P = 0.0001; McNemar test).

Most of hypoT-dogs had concurrent GI signs mainly due to large bowel involvement. After THRT beginning the concurrent GI signs in hypoT-dogs seem to be reduced.

Concurrent gastrointestinal signs in hypothyroid dogs

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Introduction and hypothesis

Few studies on prevalence and features of gastrointestinal (GI) sign in hypothyroid dogs (hypoT-dogs) are available. The study aimed:

- (1) to evaluate frequency of concurrent GI signs in hypoT-dogs;
- (2) to compare clinico-pathological and hepatic and intestinal ultrasound features of hypoT-dogs with and w/out GI signs
- (3) to evaluate associations between thyroid hormone replacement therapy (THRT) and improvement of GI signs

Methods

Medical record review of hypoT-dogs from two Veterinary Teaching Hospitals.

- ✓ Hypo-T if fT4 were low/normal with normal/high TSH or inadequate TSH-stimulation test response.
- ✓ HypoT-dogs were divided based on the presence of at least one GI sign (GI group and non-GI group; Fig. 1).
- ✓ Twenty-seven GI dogs have been rechecked after 3-4 weeks of THRT and information on GI signs were recorded (Fig. 2)



Fig. 1: Frequency of GI signs in study population

No significant difference between GI and non-GI groups on hematobiochemical parameters was found

Conflict of Interest Disclosure Statement - NONE

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Ultrasound GI alterations	GI group	Non-GI group	P-value
Small bowel *	2/27 (7.4%)	1/23 (4.3%)	0.65
Large bowel *	5/27 (18.5%)	0/23 (0%)	0.03
Hepatopathy [§]	14/27 (51.9%)	13/23 (56.5%)	0.74
Cholestasis /Gallbladder mucoceles [§]	16/27 (59.3%)	13/23 (56.5%)	0.85

* Fisher's exact test § Chi-square test

Most of hypoT-dogs had concurrent GI signs associated with large bowel involvement. After the beginning of THRT the concurrent GI signs in hypoT-dogs seem to be reduced

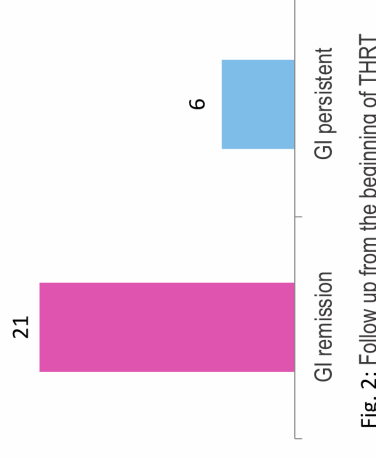


Fig. 2: Follow up from the beginning of THRT

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