


DATE PRESENTING CLINICAL SIGNS

2/19/26

Patient History: Presents for annual wellness exam and bloodwork. Bloodwork shows worsening proteinuria despite treatment with telmisartan and worsening elevations in ALP and ALT. Historical hypothyroid currently controlled with thyroxine. Clinically pet is doing well, exam consistent with senior dog exam- numerous lipomatous fatty growths and a grade 2/6 heart murmur.

PATIENT

Brody Kral

SPECIES

Canine

Current Medications: Thyroxine 0.8 mg bid for > 5 yrs, Telmisartan 50 mg (increased from 40 mg on 1/19/26) q 24 hrs. Initially started in October, Simparica Trio
Labwork Results: Labwork attached, reported as: ALT 164 (18 - 121 U/L), ALP 961 (5 - 160 U/L) prev 805
 Urine Protein:Creatinine Ratio 2.9 prev 3.1

BREED

Pit Bull

Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed by: Stephanie Warga RDCS, RVT.

SEX

Neutered Male

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN
Urinary System
AGE

9/28/14

The urinary bladder is adequately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

WEIGHT

90 lbs

The area of the prostate is examined without evident prostatic pathology.

INTERPRETED BY

 Beth Johnson, DVM
 DACVIM

The right kidney is normal is size (7.84 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

HOSPITAL NAME

 Fullerton Animal
 Hospital

The left kidney is normal is size (7.54 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

Adrenal Glands
REFERRING VET

Dr. Unger

The right adrenal gland is normal in size (1.0 cm at cranial pole and 0.65 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

INVOICE

73112

left adrenal gland is plump/swollen in size, primarily due to a discrete homogeneous 2.2 cm x 3.6 cm hyperechoic nodule in the cranial pole. The caudal pole measures 0.94 cm. Normal shape and contour are maintained without evidence of capsular invasion. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

Spleen

Spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to

liver). Multifocal well-demarcated hyperechoic homogenous nodules are noted. Splenic vasculature appears normal.

Liver

Liver is subjectively enlarged with mildly irregular margins. Parenchyma is moderately heterogenous characterized by multiple poorly defined hypoechoic nodules within otherwise hyperechoic liver parenchyma. Visible vasculature and biliary tree appear normal without distension or congestion

Gallbladder is moderately distended with anechoic bile as well as suspended and gravity dependent echogenic debris. The wall is smooth without visible thickening. There is no evidence of cystic or CBD dilation. There is no evidence of effusion or inflammation.

Gastrointestinal

The visible stomach wall is normal in thickness and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

The visible small intestine demonstrates areas of moderately thick muscularis layer relative to mucosa (disruption of the normal 1:3 muscularis:mucosa ratio). Small intestinal submucosa is slightly irregular, thick and hyperechoic, without evident loss of layering appreciated. Additionally, some very subtle mucosal fogging or speckling is noted. The lumen of the small intestine is empty with no evidence of obstruction or foreign material.

The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

Pancreas

The pancreas that is observed appears appropriately isoechoic to surrounding omental fat. Visible capsule is smooth and normal in contour. Visible pancreatic parenchyma is homogenous and unremarkable. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

Free Abdomen

There is no visible free peritoneal effusion noted in these images.

There is no apparent pathologic lymphadenopathy noted in these images.

PRIMARY FINDINGS

- Hyperechoic adrenal nodule (cranial pole left adrenal gland) – Differentials include primary adrenal cortical adenoma or adenocarcinoma, pheochromocytoma, myelolipoma, adrenal hyperplasia secondary to pituitary disease or metastatic disease. Ultrasound alone cannot differentiate between functional and non-functional nodules and/or between benign and malignant disease. Small nodules without other evidence of abdominal disease (to suggest metastatic disease) and/or clinical signs (to suggest adrenal disease) are most often incidental and should be monitored.

- Moderately heterogenous liver – These changes are most consistent with benign processes such as nodular hyperplasia, steroid (vacuolar) hepatopathy, extramedullary hematopoiesis or possibly chronic inflammatory disease and less commonly infiltrative round cell or metastatic neoplasia.
- Mild gallbladder debris - Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness. Cholecystic debris is not necessarily related to hepatobiliary disease. Echogenic bile is most commonly an incidental finding in dogs and should be interpreted in combination with clinical signs such as nausea, inappetence, cranial abdominal discomfort and/or laboratory changes such as increased ALP and/or increased Tbili.
- Moderate inflammatory bowel disease (IBD) pattern – Thick muscularis has been reported with infiltrative bowel disease including both benign inflammatory disease as well as infiltrative neoplasia such as lymphoma. No loss of layering or distinct characteristics of malignancy are present. Therefore, differentials cannot be further ranked without tissue sampling.
- Subtle mucosal speckling – Mucosal speckling is often present with inflammatory bowel disease (IBD). It is not specific for type or severity of disease. Mild speckling change can occur as a normal patient variant in the post-prandial state.

SECONDARY FINDINGS

- Hyperechoic splenic nodules – most consistent with benign myelolipomas. Other differentials such as fibrosis or calcification caused by old hematomas or infarcts, chronic inflammation, granulomatous disease or metastatic disease cannot be ruled out, but are considered less likely.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

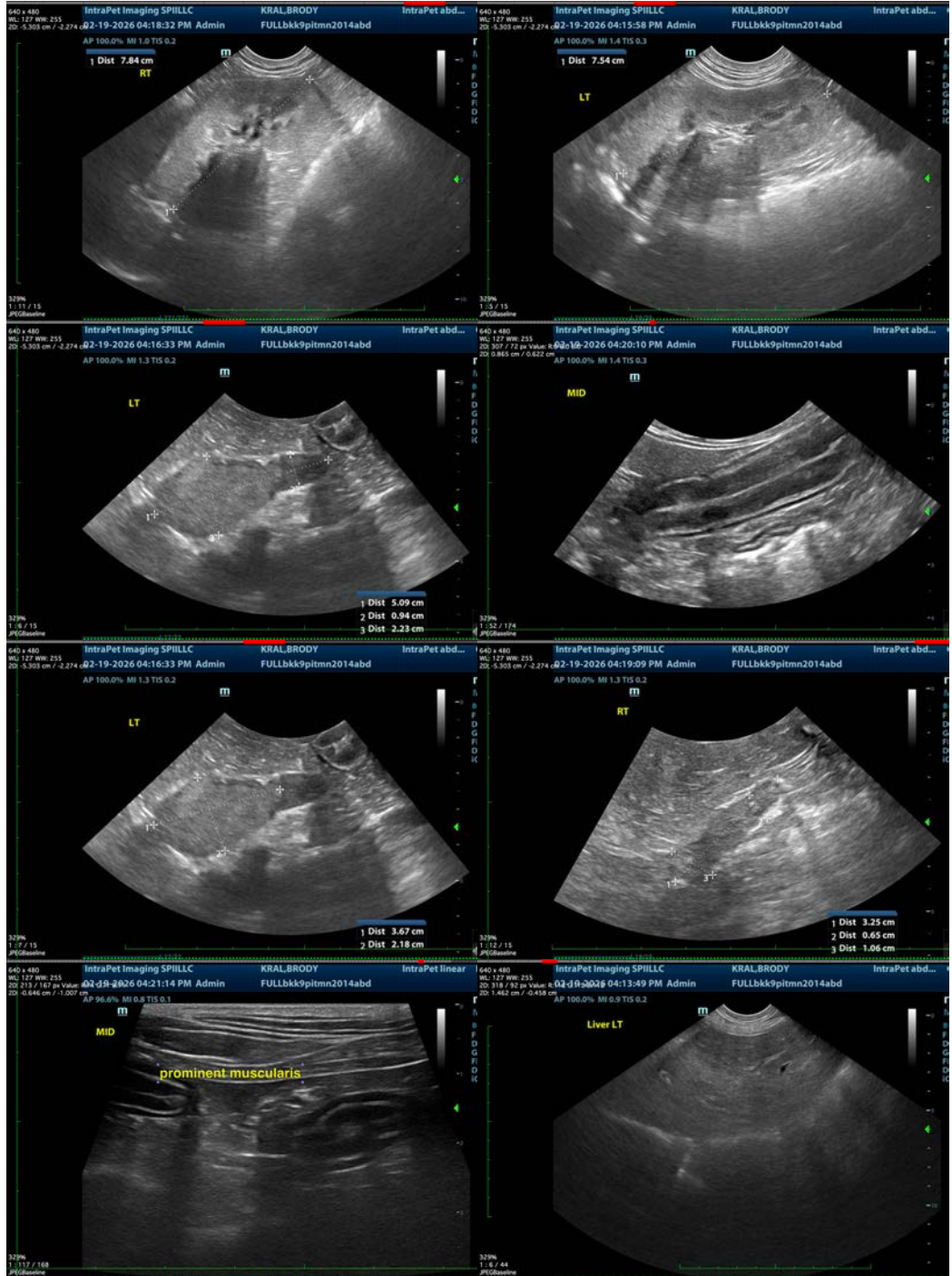
Given patient's lack of response to management of the reported proteinuria, further workup/evaluation for underlying contributing causes is recommended, including, if clinical signs of hyperadrenocorticism are consistent and given the changes described above, hormone testing such as a low-dose Dexamethasone suppression test. Additionally, a blood pressure is recommended.

Comprehensive infectious disease evaluation including vector borne disease, Lepto, etc. could be considered.

Further gastrointestinal workup may be warranted if clinical history if appropriate.

Ultimately, given the possible combination of contributing factors as well as lack of response to management, etc., a full internal medicine consult or referral to an internist could be considered.





The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

Thank you for this referral. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance please contact me.

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