



DATE PRESENTING CLINICAL SIGNS

4/21/26

Patient History: P presents for possible arthritis/pain in hind end; bloodwork performed revealed elevated liver values.

PATIENT

Ziggy Thompson

Current Medications: Thyro tabs, interceptor plus, tylosin, Pepcid, probiotic, omega 3s, ketolorac, tacrolimus+/-cyclosporine, cobalequin

Labwork Results: Labwork not attached, reported as: AST 76 ALT 275 ALKP 312

Date of Previous IntraPet Ultrasound: 6/6/25. See attached.

SPECIES

Canine

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed by: Rachel Brillhart, RDMS.

BREED

Mini Schnauzer

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

SEX

Neutered Male

Urinary System

The urinary bladder is moderately distended with anechoic urine. The Bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, or masses. In the dependent portion of the urinary bladder there are pinpoint hyperechoic foci most consistent with small stones/mineralized debris.

AGE

10/20/11

The prostate is normal in size (0.90 cm) and shape for this neutered male dog. The parenchyma is homogenous and the external margins are smooth. The prostatic urethra appears normal with no evidence of irregularity, invasion, mass effect or calculi.

WEIGHT

15.4 lbs

The left kidney has a normal shape and size (4.82 cm) with occasional small cortical cysts. An example measures 0.32 cm. Numerous small non-obstructive nephroliths are also noted. Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

INTERPRETED BY

Kathleen Sennello DVM,
MS, Diplomate ACVIM
(Small Animal Internal
Medicine)

The right kidney has a normal shape and size (4.7 cm) with numerous small cortical cysts and non-obstructive nephroliths. Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

HOSPITAL NAME

Jacksonville Veterinary
Hospital

Adrenal Glands

REFERRING VET

Dr. Kablis

The left adrenal gland is normal in size measuring 0.58 cm at the cranial pole and 0.68 cm at the caudal pole. It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

INVOICE

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The right adrenal gland is large and borderline abnormal in shape, measuring 0.92 cm at the cranial pole and 0.52 cm at the caudal pole. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is abnormal in appearance in that there is some hypoechoic, partially mineralized tissue visualized near the cranial pole of the adrenal, concerning for a nodule/mass effect, measuring 1.34 cm in diameter. No evidence of vascular invasion is visualized.

Spleen

The spleen is normal in size and shape, measuring 1.06 cm in width at the level of the hilus. The blood flow through the hilus and splenic parenchyma appears normal. There are numerous pinpoint foci within the spleen, most consistent with dystrophic mineralization. The hypoechoic structure adjacent to the spleen is stable from the previous scan, measuring 1.08 cm x 1.16 cm, possibly consistent with accessory splenic tissue.

Liver

The liver is large in size and rounded. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. The previously described hypoechoic nodule is not clearly visualized on today's exam, but there are ill-defined hypoechoic nodules occasionally visualized.

The gall bladder lumen is significantly distended. Some areas of the wall appear mildly thickened with adherent debris. There is a large amount of primarily non-organized echogenic debris. There is no evidence of bile duct dilation.

Gastrointestinal

The stomach contains minimal luminal contents. It measures at a normal thickness of 0.48 cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layers is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

The visualized areas of duodenum, jejunum and ileum have a uniform diameter with minimal fluid distension. Wall appears subjectively, mildly increased. Bowel loops follow a typical curvilinear path with distinct wall layering. Duodenum wall measures 0.48 cm. Jejunum wall measures 0.40 cm. Visualized peristalsis appears appropriate. There is mild mucosal speckling visualized. In the mid caudal abdomen there are areas of bowel with surrounding hyperechoic mesentery and scant free fluid.

Sections of colon are visualized with formed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

Pancreas

The pancreas is visible/mildly mottled. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

Free Abdomen

There is scant free abdominal fluid. No significant lymphadenopathy. The omentum is hyperechoic around some of the thickened sections of small intestine.

PRIMARY FINDINGS

- Small, dependent calculi/mineralized debris visualized in the urinary bladder – Correlate with urinalysis, culture +/- radiographs.
- Significant age related changes visualized associated with both kidneys in addition to non-obstructive nephroliths.
- Large, heterogeneous, rounded liver with occasional ill-defined hypoechoic nodules – The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy. The nodules

observed trend toward a more benign process but underlying neoplasia cannot be ruled out.

- Large gallbladder with a large amount of non-organized echogenic intraluminal disease – A large amount of debris is evident in the gall bladder with no evidence of a mucocele or associated inflammation at this time. This could represent an early mucocele or cholestasis, with minimal evidence of associated inflammation at this time. Continued monitoring of labwork and ultrasound are warranted for progression of this lesion. Ursodiol therapy could be considered.
- Abnormal mineralized tissue near the cranial pole of the right adrenal gland – Concerning for a mass effect. Findings could be consistent with an adenoma, carcinoma, early pheochromocytoma, other.
- Diffusely thickened small intestine with mild mucosal speckling – The diffuse splenic changes are non-specific and could be consistent with lymphoid hyperplasia, extramedullary hematopoiesis, infiltrative neoplasia, inflammation, other. Cytology or histopathology would be necessary to get a definitive diagnosis.

SECONDARY FINDINGS

- Dystrophic mineralization visualized associated with the spleen, as well as a suspected daughter spleen (stable from previous exam on 6/6/25).
- Pancreatic changes most consistent with mild chronic remodeling.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Many of the changes observed on today's scan appear similar to the previous exam on 6/6/25. This would include the mineralizations in the urinary bladder, the renal changes, and the appearance of the liver and spleen.

The gallbladder debris appears slightly more pronounced on today's exam, but there is no evidence of significant wall thickening or surrounding inflammation. Consider starting Ursodiol therapy and continued monitoring of the gallbladder.

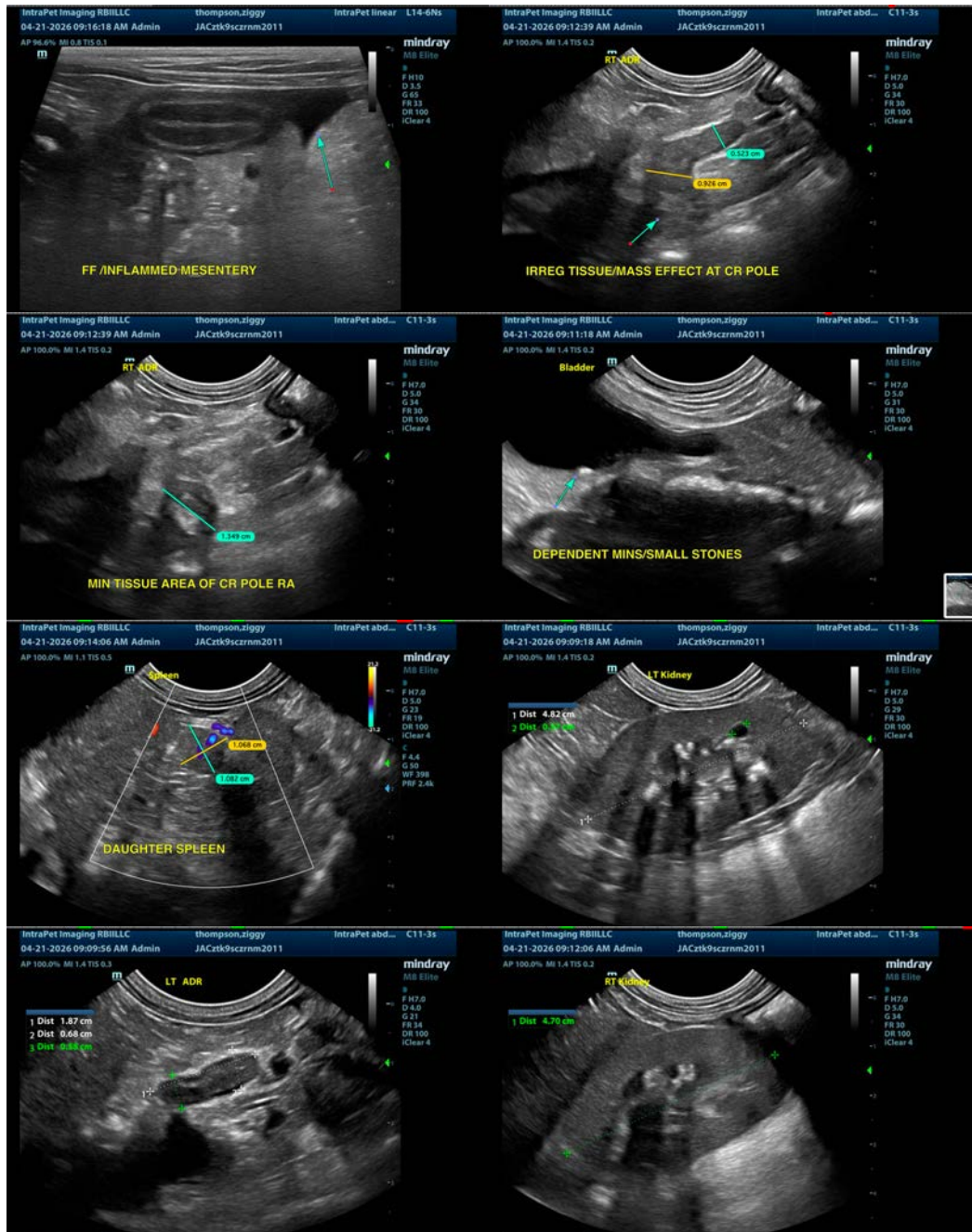
There is some irregular mineralized tissue visualized in the region of the cranial pole of the right adrenal. This is concerning for a possible early mass effect. Options for further evaluation could include a contrast CT scan and/or reevaluation with ultrasound in 6-8 weeks. Additionally, consider a blood pressure evaluation. If hypertension is present, recommend measuring catecholamine levels, looking for a possible pheochromocytoma. If symptoms consistent with Cushing's are present, you could consider adrenal function testing.

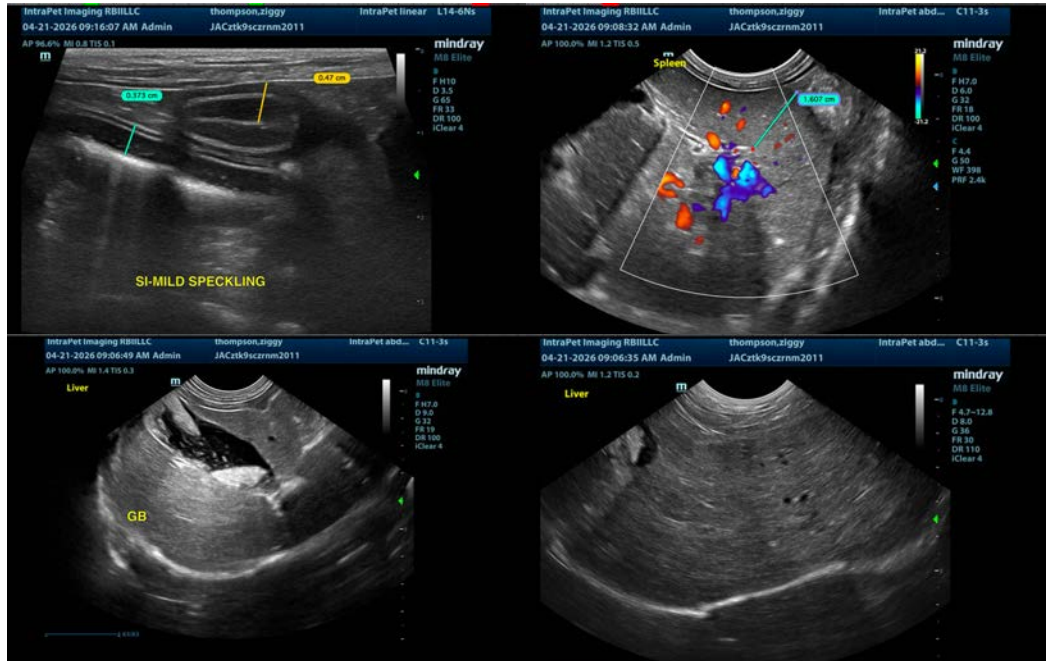
The small intestine appears diffusely thickened with evidence of mild mucosal speckling, particularly with a high frequency probe. There are some loops of bowel that have scant surrounding free abdominal fluid and appear mildly thickened, possibly consistent with lymphangiectasia, a primary enteropathy, etc. Correlate with the current albumin level and consider the following:

- Consider a combination ultra low-fat/hydrolyzed protein prescription diet (Royal Canin has this option).
- A gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory is recommended for further evaluation of GI and pancreatic function.

- Recommend probiotic therapy.

If findings are persistent, ultimately biopsies of the GI tract may be warranted to further evaluate.





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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