



**PATIENT**

Tibby Chen

**SPECIES**

Canine

**BREED**

Longhair Dachshund

**SEX**

Spayed Female

**AGE**

2 Years

**WEIGHT**

14 Pounds

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Shari Reffi, CVT

**HOSPITAL NAME**

Whippany Vet Hospital

**REFERRING VET**

Dr. Enoch

**INVOICE**

45822

**DATE**

3/9/23

**PRESENTING CLINICAL SIGNS**

Chronic vomiting approx 1 mos duration. Subsides with Cerenia but returns. Small meals of I/D food and Pepcid not helping. Current meds: Cerenia 24mg 1/2 t sid PRN; Pepcid , HG

Abnormal PE/Chem/CBC/UA Results: ALT 401 on 2/8/2023; ALT 104 2/22/2023

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**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, masses or cystic calculi.

The left kidney has a normal shape and size (3.44 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. Corticomedullary rim sign is visualized. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (3.63 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. Mild corticomedullary rim sign is visualized. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**Adrenal Glands**

The left adrenal gland is normal in size measuring 0.44 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.

The right adrenal gland is normal in size measuring 0.59 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 normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

**Spleen**

The spleen is subjectively normal in size, echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

**Liver**

The liver is borderline small, with normal echogenicity and smooth peripheral margins. The parenchyma is homogenous echotexture. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed.

The gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are mild and primarily anechoic. The cystic and common bile ducts are normal/not visible.

**Gastrointestinal**

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.7cm 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.



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The visualized areas of duodenum, jejunum and ileum have a relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. Duodenum wall measures 0.44 cm. Jejunum wall measures 0.35 cm. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. 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 prominent and mottled compared to the surrounding isoechoic mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

**Free Abdomen**

Evaluation of the peritoneal cavity did not reveal any evidence of effusion, or subjective lymphadenomegaly. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of normal uniform echogenicity.

**ULTRASONOGRAPHIC FINDINGS**

- Mild corticomedullary rim sign visualized in both kidneys – Clinical significance uncertain, can be seen in normal patients and in cases of ethylene glycol toxicity, FIP, chronic interstitial nephritis, and leptospirosis.
- Prominent, mottled pancreas – The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.
- Borderline small liver – Recommend a liver function test (pre- and post-prandial bile acids).

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

No lesions are visualized associated with the gastrointestinal tract to explain the chronic vomiting reported. Unfortunately, there are many causes for vomiting that cannot be diagnosed by ultrasound alone. The vomiting could be associated with the elevation in ALT or be a separate issue. I would consider them as separate issues at this time. The most common causes for chronic vomiting in young dogs would include dietary indiscretion, food allergy/dietary intolerance, GI parasitism, and dysbiosis. IBD and neoplasia are much less likely. Consider the following:

- Consider a novel protein/hydrolyzed protein diet (exclusively at least 4-6 weeks)/
- Consider a GI panel to Texas A&M for evaluation of B12 levels, folate, PLI/TLI etc.. to further evaluate for pancreatic/small intestinal disease.
- Consider parasite screening and empirical deworming.
- Recommend pre- and probiotic therapy.

No focal lesions are visualized associated with the liver. It is subjectively slightly small. Recommend a liver function test (pre- and post-prandial bile acids). A liver shunt was not clearly visualized on today's exam, but if the bile acids are significantly elevated, a contrast CT scan may be considered, looking for a small shunting vessel. Additionally, consider screening for Leptospirosis and possibly a fine needle



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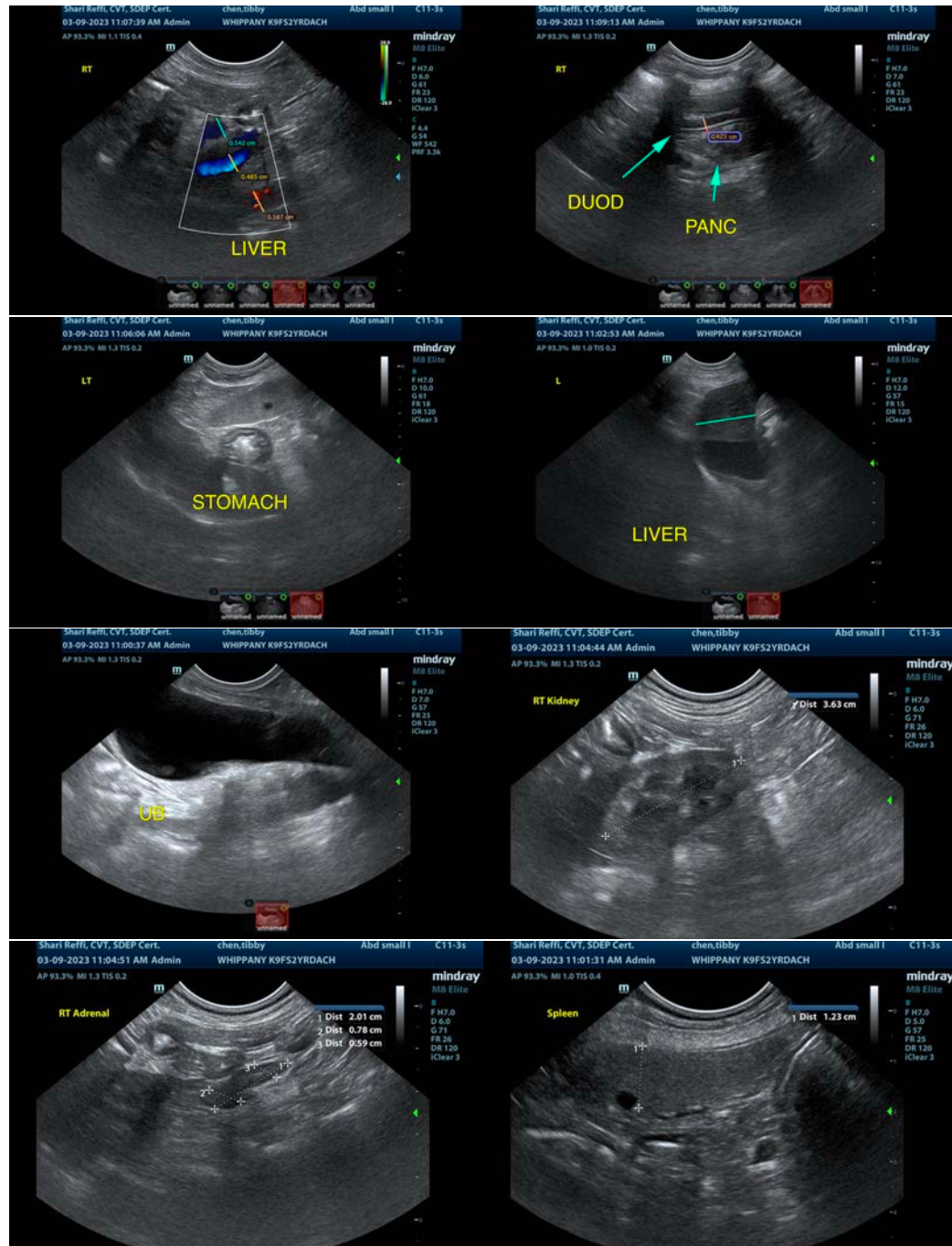
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aspirate (provided coagulation parameters are normal). Additionally, evaluate any new treats, medication, etc. that could elevate the ALT, and recommend continued monitoring.

No evidence of foreign body ingestion or foreign material was observed on today's scan, but continued monitoring is warranted. Correlate these findings with physical exam findings, radiographs, etc.





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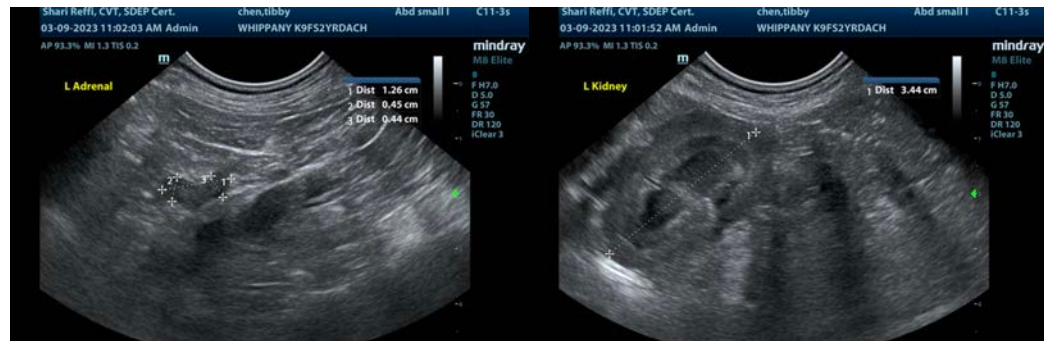
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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

kathleen.sennello@sonopath.com