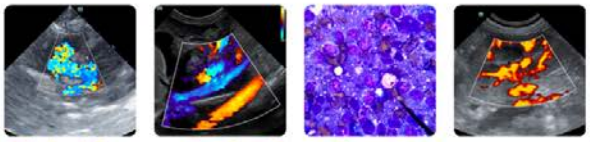


PATIENT

Mikey Ortiz

SPECIES

Canine

BREED

Shih Tzu

SEX

Neutered Male

AGE

7 Years

WEIGHT

20.4 lbs

INTERPRETED BY

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

IMAGING PERFORMED BY

Gabriel Ferrer, DVM

HOSPITAL NAME

Pulse: Pet Ultrasound

REFERRING VET

Dr. Marilyn Davila

INVOICE

75670

DATE

6/4/26

PRESENTING CLINICAL SIGNS

Px presented as a referral for an abdominal ultrasound due to elevated hepatic enzyme levels. Px originally visited rDVM for a routine check, bloodwork was performed and elevated hepatic enzyme levels were noted, Px was then started on Denamarin. On follow up appointment, bloodwork was repeated and most levels had lowered but they were still out of range, but ALKP had significantly increased. Owner reports that Px has been asymptomatic, no V/D, no lethargy, no inappetence, no coughing, and no PU/PD/PP reported.

Abnormal PE/Chem/CBC/UA Results: Bloodwork attached below for your reference.

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 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. There is a small hyperechoic focus visualized in the region of the prostatic urethra, most consistent with a small mineralization/calculi measuring 0.15 cm.

The left kidney has a normal shape and size (4.83 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. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (4.8 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. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

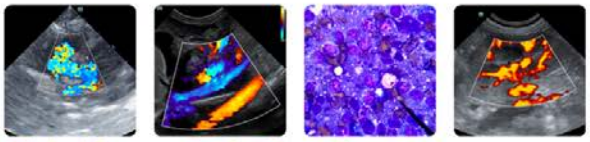
Adrenal Glands

The left adrenal gland is normal in size measuring 0.53 cm at the cranial pole and 0.51 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 0.49 cm at the cranial pole and 0.51 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 (1.38 cm), echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. There is a mixed echogenicity hypoechoic nodule visualized measuring 0.94 cm x 1.56 cm.



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Liver

The liver is large in size, and normal in echogenicity with smooth peripheral margins. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed.

The gall bladder lumen is moderately distended. There is a moderate amount of non-organized echogenic debris. Some of the debris appears slightly adhered to the gallbladder wall. The gallbladder wall is normal in thickness at 0.12 cm. The cystic duct is slightly dilated and prominent distally. The common bile duct measures 0.48 cm at the level of the duodenal papilla.

Gastrointestinal

The stomach contains minimal luminal contents. It measures at a normal thickness of 0.38 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 0.55 cm. Jejunum wall measures 0.36 cm. There is mild mucosal fogging and speckling visualized associated with the duodenum and some areas of jejunum. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

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 in both limbs. 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. There is no significant lymphadenopathy. A mesenteric lymph node is visualized measuring 0.26 cm. The omentum is of normal echogenicity.

ULTRASONOGRAPHIC FINDINGS

- Small mineralization visualized in the region of the prostatic urethra – Correlate with urinalysis findings and recommend continued monitoring.
- Mixed echogenicity hypoechoic nodule in the spleen – There is a non-cavitated, hypoechoic splenic nodule visualized. Differentials include lymphoid hyperplasia, extramedullary hematopoiesis, infiltrative neoplasia, inflammation, other. Cytology or histopathology would be necessary to get a definitive diagnosis.
- Pancreatic changes most consistent with mild pancreatic remodeling.
- Large, heterogeneous liver – The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated

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disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy.

- Moderate gallbladder debris with some debris adhered to the gallbladder wall and prominent/mildly dilated bile duct – Dilation of the common bile duct could be consistent with a functional obstruction (i.e. primary hepatic disease resulting in hepatocellular swelling) or with an extrahepatic bile duct obstruction (ie. choledocholith, bile duct tumor, pancreatic disease, other).

- Mild mucosal fogging and speckling visualized associated with the small intestine – Bright mucosal speckling has been postulated to represent dilated lacteals or focal accumulations of mucus, cellular debris, etc.. in the mucosal crypts.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

No significant focal lesions are visualized associated with the liver. Generally, it appears mildly enlarged and somewhat heterogeneous, possibly consistent with a vacuolar hepatopathy, although other hepatopathies are possible.

The gallbladder has a moderate amount of debris with some very mild organization at the gallbladder wall. The bile duct is visible and mildly dilated distally. The significance of this is uncertain. You could consider Ursodiol therapy and continued monitoring of the region.

If there is concern for more significant hepatopathy, consider pre- and post-prandial bile acids to assess liver function and a fine needle aspirate of the liver.

There is a small, hypoechoic nodule in the spleen. Options moving forward include continued monitoring or a fine needle aspirate.

The small intestine is mildly thickened with some areas exhibiting very mild fogging and speckling. The significance of this in the absence of underlying gastrointestinal symptoms is uncertain. If further evaluation is desired, you could consider a GI panel to Texas A&M for a qualitative PLI, TLI, cobalamin and folate. If significant abnormalities are present, further workup may be warranted.

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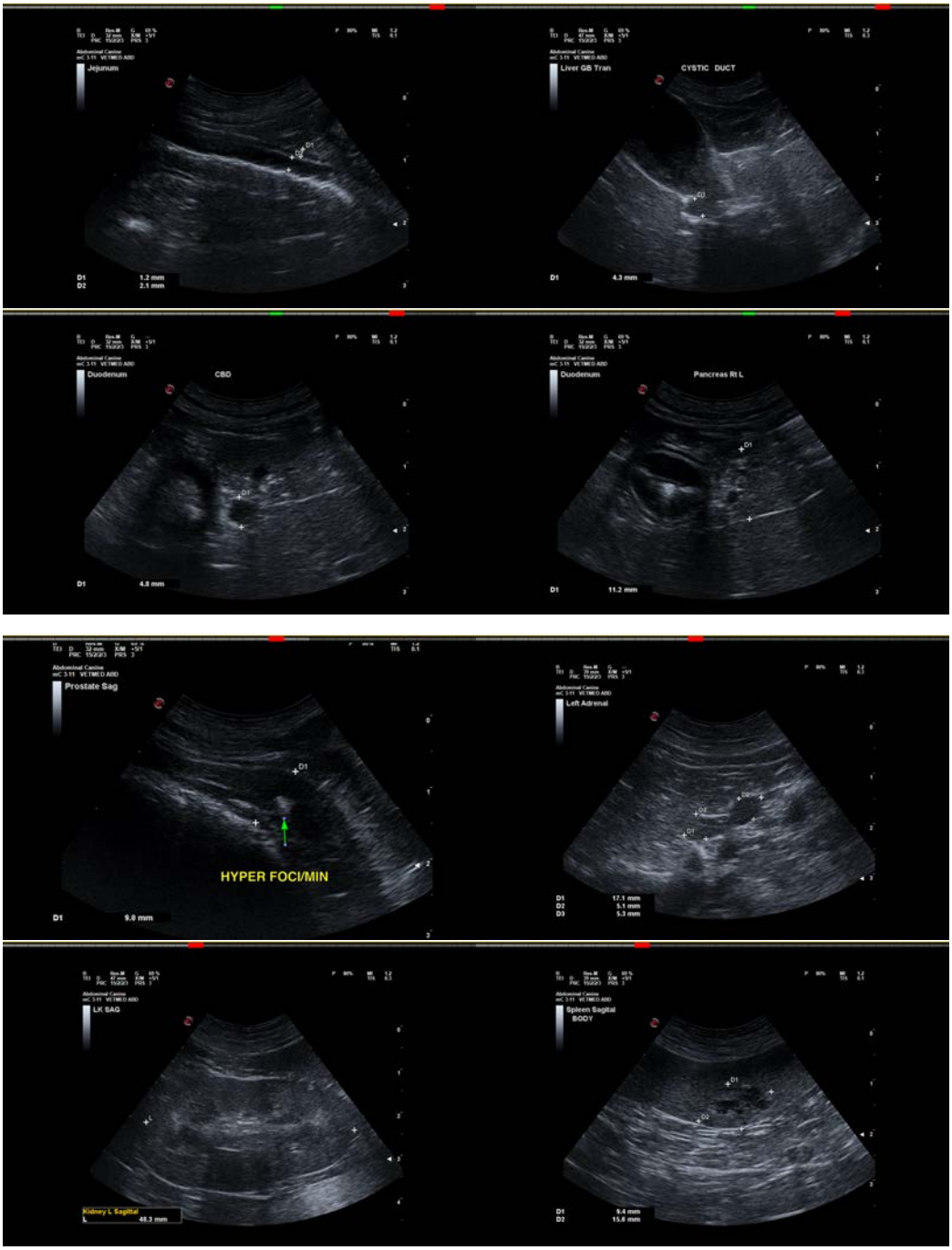

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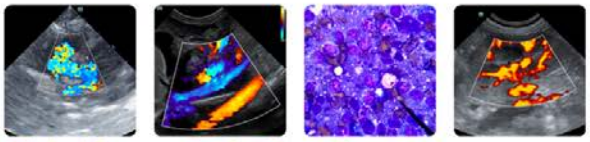

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Educational Teleconsultation Services™

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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)

info@sonopath.com