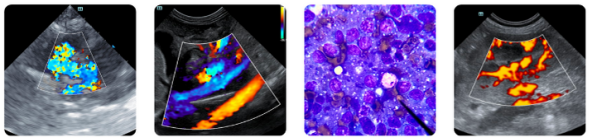


PATIENT

Nana Aguayo

SPECIES

Canine

BREED

Miniature Schnauzer

SEX

Spayed Female

AGE

14 years

WEIGHT

15 lbs

INTERPRETED BY

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

IMAGING PERFORMED BY

Dr. Gabriel Ferrer

HOSPITAL NAME

Pulse Pet Ultrasound Services

REFERRING VET

Dr. Gabriela Miranda

INVOICE

10722

DATE

11/11/2025

PRESENTING CLINICAL SIGNS

Presented as a referral for a combine study, echocardiogram and abdominal ultrasound to evaluate elevated liver enzymes, heart murmur and newly develop possible seizures, syncope episodes. Pt had a previous history of heart murmur and was previously diagnosed as CDVD of Mitral Valve Stage B1, but wanted to recheck and determine if condition has worse. Currently pt is not on any cardiac medication. Also, pt developed very high elevated liver enzymes and pt was hospitalized and the values after IV fluids and other medications like enrofloxacin helped Tbili and GGT to decrease.

Abnormal PE/Chem/CBC/UA Results: Bloodwork attached as supporting documents. ALT: so high did not read ALP: > 2,000.

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 (3.52 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's mild pyelectasia noted measuring 0.14 cm. There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (4.33 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's mild pyelectasia noted measuring 0.16 cm. There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.37 cm at the cranial pole and 0.42 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.

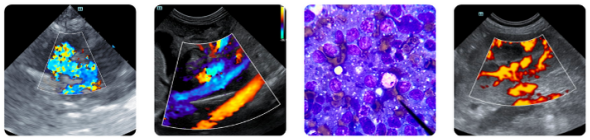
The right adrenal gland is normal in size measuring 0.44 cm at the cranial pole and 0.43 cm at the caudal pole. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

Spleen

The spleen is subjectively normal in size (1.07 cm) and the echotexture is homogenous. The splenic capsule is smooth with no visible irregularities. The blood flow through the hilus and splenic parenchyma appears normal.

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



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vasculature and biliary tract appear normal. There's an ill-defined hypoechoic nodule in the left side of the liver measuring 0.3 cm x 0.48 cm.

The gall bladder lumen is significantly distended. There is focal apical wall thickening of the gallbladder measuring at 0.42 cm. There is a large amount of primarily non-organized echogenic debris. The distal bile duct appears somewhat prominent and dilated with a small amount of intraluminal debris at the level of the duodenal papillae measuring at 0.39 cm.

Gastrointestinal

The stomach contains mild/moderate fluid/ingesta. It measures at a normal thickness of 0.31 cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layering 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 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. The duodenum measured as normal (0.28 cm in wall thickness) and the jejunum measured as normal (0.23 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 visible/mildly mottled in the right limb. 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 bilateral pyelectasia. Recommend urinalysis and culture. Findings could be consistent with PU/PD, early pyelonephritis, less likely obstructive disease.
- Pancreatic changes most consistent with chronic pancreatic remodeling.
- Large, heterogenous liver with an ill-defined hypoechoic nodule. The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, infiltrative neoplasia (less likely) or other hepatopathy. The hypoechoic nodule has the appearance most consistent with a benign lesion at this time. Although, an early neoplastic lesion cannot be ruled out.

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- Large gallbladder distended with non-organized debris, and focal apical wall thickening. Findings could be consistent with cholecystitis and focal wall inflammation. An early mass effect cannot be ruled out.
- Dilated bile duct with intraluminal debris. Findings are most consistent with inflammation/passing debris. A focal obstruction is not clearly visualized.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The gallbladder is large with a large amount of disorganized intraluminal debris. The apical wall of the gallbladder appears focally thickened and irregular. This could be consistent with focal inflammation or even an early mass effect. Based on the history provided there's been improvement with treatment for cholangiohepatitis. Recommend continued treatment with ursodiol, denamarin, antibiotics, and supportive care with repeat imaging of the gallbladder in two weeks or sooner if the patient is not improving.

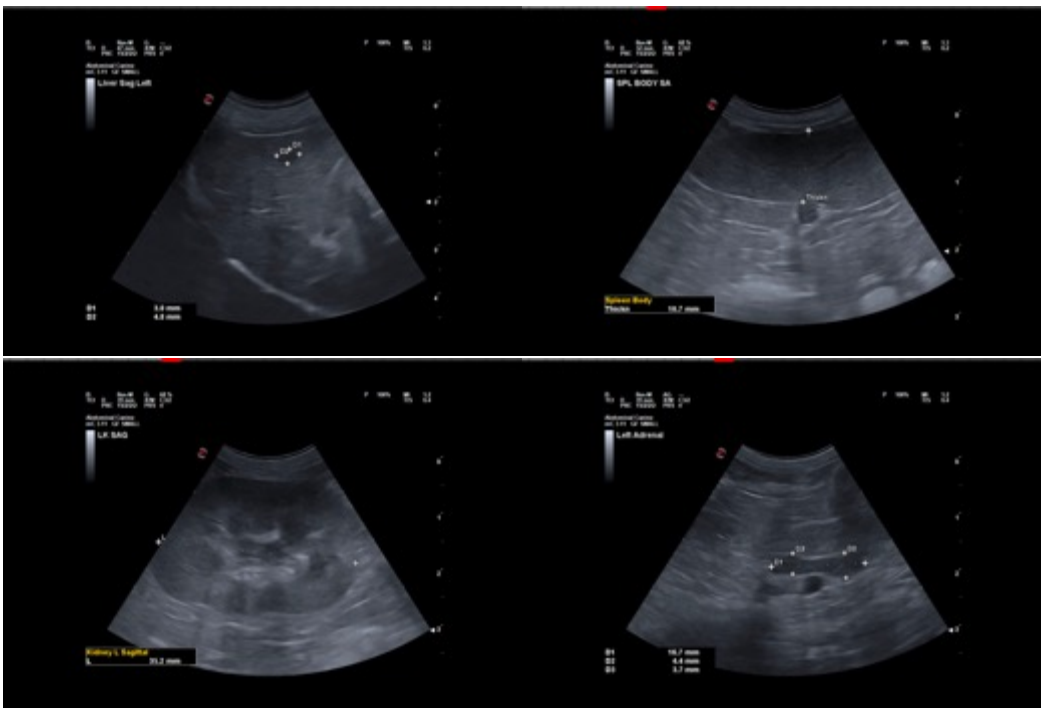
The liver is large and heterogenous. The appearance is most consistent with a vacuolar hepatopathy. Although, other hepatopathies are possible and the ALT is severely elevated so a fine needle aspirate would be recommended to further evaluate for infiltrative neoplasia or similar.

Consider screening for leptospirosis if clinically appropriate.

If liver values continue to worsen consider repeat imaging and possibly referral to a surgeon for liver biopsies and evaluation of the gall bladder.

I would suspect the "episodes" described are secondary to either an arrythmia or neurologic episodes. End stage liver disease can cause seizures, so liver disfunction is possible but this seems less likely.

Consider three view thoracic radiographs to rule out concurrent thoracic disease/involvement.



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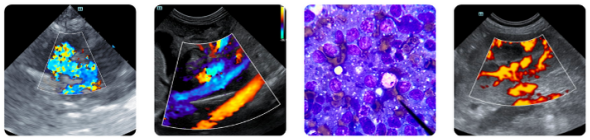

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Educational Teleconsultation Services™

SonoPath.com info@sonopath.com 1.800.838.4268

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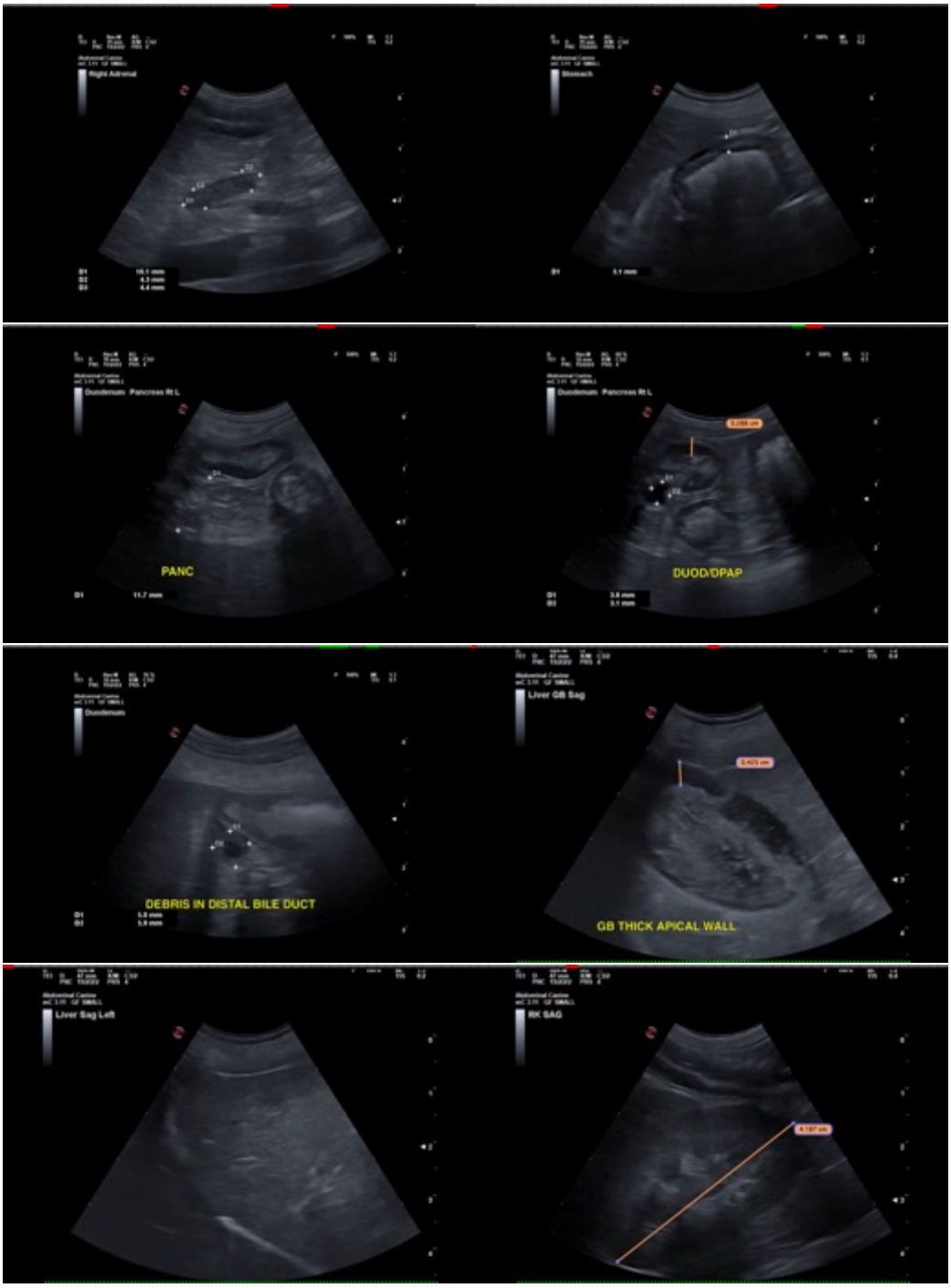
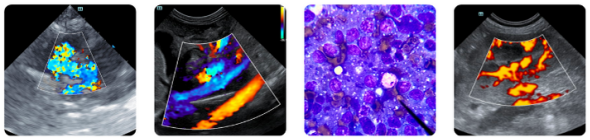


The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

Thank you for this referral. If the clinical or image interpretation does not parallel your findings or if I



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can be of any further assistance please contact me.

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