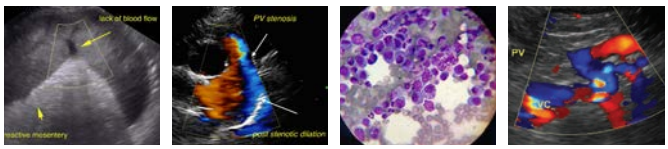

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1-800-838-4268 info@sonopath.com

PATIENT

Zoe Lyman

SPECIES

Canine

BREED

Maltese X

SEX

Intact Female

AGE

6 Years

WEIGHT

5.5 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Dr. Elaina Petrone

HOSPITAL NAME

Long Branch AH

REFERRING VET

Dr. Elaina Petrone

INVOICE

44281

DATE

1/17/23

PRESENTING CLINICAL SIGNS

Presented to local ER for possible seizure. CBC/chem/T4-WNL Bile acids pre: 76.1 post: 95.3 Resting cortisol-2.6 C protein 125%

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 (3.07 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 (2.5 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 0.40 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 region of the right adrenal (between right cranial kidney and vena cava) is unremarkable, but the adrenal is not distinctly visualized. No evidence of a mass effect is visualized.

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

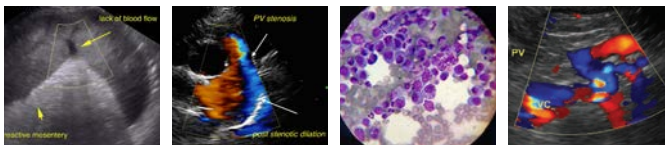
The liver is subjectively normal, with normal echogenicity and smooth peripheral margins. The parenchyma is homogenous in echotexture. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed.

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.

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



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layering maintaining the typical 1:3 muscularis:mucosa layer ratio. Jejunum wall measures 0.25 cm. Duodenum wall measures 0.32 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 normal and isoechoic to surrounding 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

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

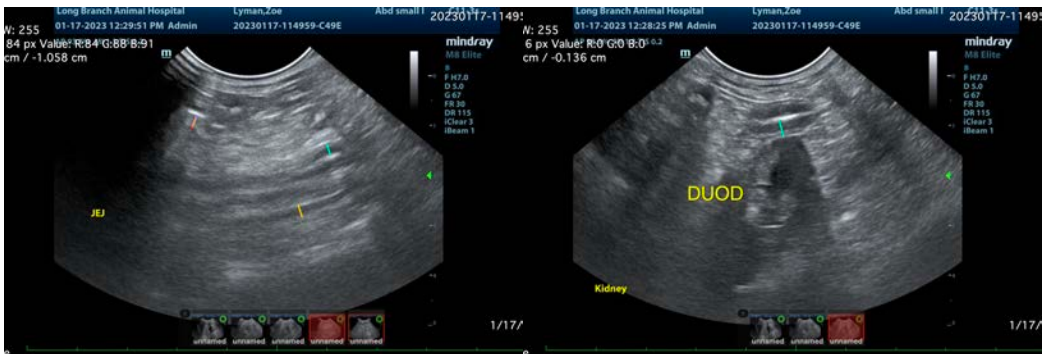
- No significant ultrasonographic lesions visualized

Today's scan appears relatively normal. The liver appears to be subjectively adequate in size with appropriate intrahepatic vascularity and volume. No obvious shunting vessel is visualized, but visualization is reduced by shadowing from the stomach and SDEP 12-14 would be needed to evaluate the portal vein, vena cava and aortic ratios. Additionally, there are no ancillary signs of a shunt such as bladder stones, nephroliths, etc. Unfortunately, I think to definitively rule out a small shunt, a contrast CT scan would be required, and a biopsy of the liver to diagnose microvascular dysplasia.

In general, seeing neurologic signs with a small or difficult to identify shunt/vascular lesion is unusual, so this could be a scenario of primary neurologic disease (inflammatory?) with concurrent liver issues (primary hepatopathy or small shunting vessels, microvascular dysplasia, etc.). A liver biopsy would likely be recommended due to the elevation in bile acids in most circumstances. If appropriate, screening for Leptospirosis could be considered.

Consider consultation with a veterinary neurologist.

Recommend three view thoracic radiographs to evaluate for possible concurrent thoracic disease/involvement.



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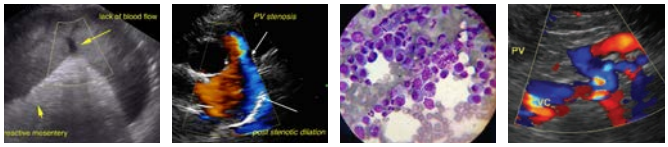

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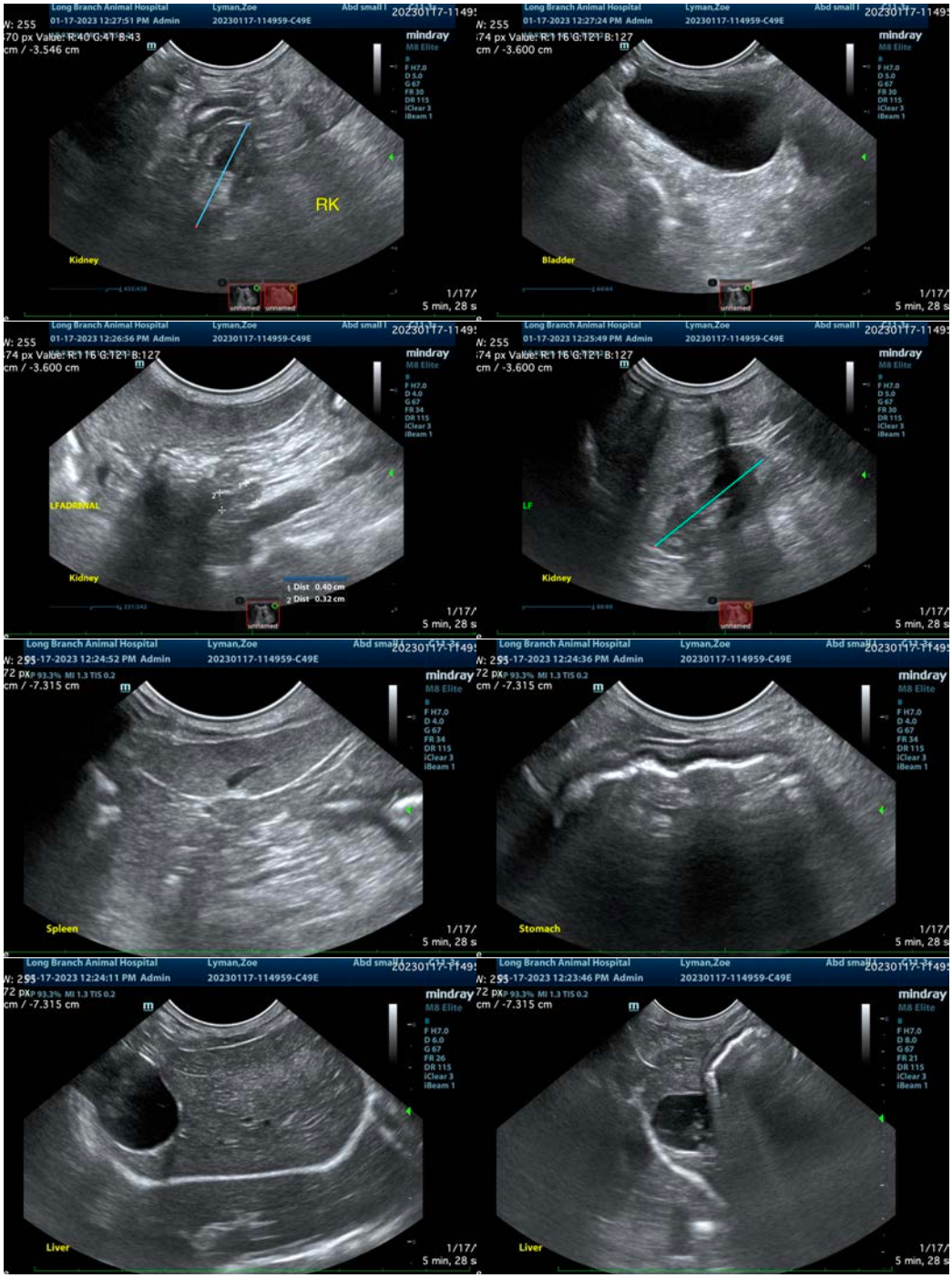

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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