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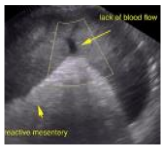
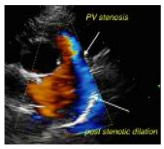
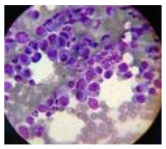
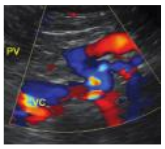

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1-800-838-4268 info@sonopath.com

PATIENT

Lola Jones

SPECIES

Canine

BREED

Pitbull

SEX

FS

AGE

2

WEIGHT

23kg

INTERPRETED BY

R. McKenzie Daniel, DVM, DABVP (Canine and Feline)

IMAGING PERFORMED BY

Kacie Edwards

HOSPITAL NAME

Boren Veterinary Medical Teaching Hospital - Oklahoma State University

REFERRING VET

Dr. Biddick

INVOICE

13672ag

DATE

05/01/2023

PRESENTING CLINICAL SIGNS

PERTINENT CLINICAL HISTORY: Lola is a 2 year old female spayed pitbull that presented to OSU ECC for vomiting and lethargy of 2 day duration and for being generally yellow. She has been unable to keep food or water down since Friday, 4/28. On Friday, the owner noticed that her urine was dark yellow to the point of being brown. After that she quickly went down hill, progressing to vomiting and lethargy. She has not had a bowel movement, though she strained without production on Saturday. On presentation, Lola's vitals were normal. She had generalized icterus (yellow color) on her skin and mucus membranes (eyes and gums). She appeared hydrated on exam. Her mentation was depressed, though she was very anxious and fearful. The rest of her physical exam appeared normal. Bloodwork reveal elevated liver values. LEADING DIFFERENTIAL/DIAGNOSIS: Liver Disease vs Gallbladder vs Pancreatitis vs Leptospirosis ALT 1603 ALP 561 GGT 18 TBIL 26.6 BUN 15 CREAT 1.4 PHOS 3.8

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 3 cm exhibited normal thickness and tone. Anechoic urine was present in the lumen with mild non-dependent particulate sediment. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes were noted.

Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio and normal corticomedullary definition were maintained. The echogenicity of the cortex was similar to or slightly less than normal liver parenchyma while the medulla echogenicity was hypoechoic to the cortex with no evidence of pelvic dilation. The left kidney measured 6.7 cm in length. The right kidney measured 6.2 cm in length.

The area of the aortic trifurcation was free of pathology.

Adrenal Glands

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.51 cm width at the caudal pole and 2.3 cm width at the cranial pole. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.46 cm width at the caudal pole and 2.7 cm width at the cranial pole.

Spleen

The spleen exhibited a finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. The capsule was smooth and regular without apparent expansion. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis. Acute to chronic inflammatory, neoplastic, or benign parenchyma changes were not noted.

Liver/Gallbladder

The liver presented normal in size. The hepatic parenchyma revealed mild reduced echogenicity compared to the spleen and renal cortical parenchyma with a mild coarse echotexture. Minor increased portal vein prominence was evident. Adequate vascular volume was present. The capsule of the liver was normal in margination. Distinct masses or nodules were not evident. The hepatic and portal vasculature were normal in appearance. The gallbladder was non-distended in size with primarily anechoic luminal content. The cystic and common bile ducts were normal.

Gastrointestinal

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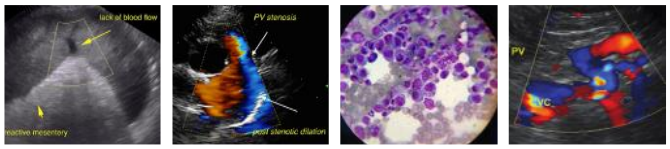

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The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach contained mild retained non-shadowing ingesta/chyme with no signs of ileus, obstruction or foreign material.

The small intestine presented intact wall layering with 1:3 muscularis/mucosa ratio. The lumen of the small intestine was empty with no signs of ileus, obstruction or foreign material. The visualized duodenal papilla were normal in appearance.

Normal visible colon wall layers were present with apparent formed feces in lumen.

Pancreas

The pancreas was normal in size with symmetrical contour and subtle heterogenous parenchyma compared to parenchyma the adjacent omental fat. The visible pancreatic duct was normal. No signs of active inflammation or neoplastic disease was evident.

Free Abdomen

No omental masses was present.

Suspect small pocket of very scant free fluid noted between the cranial right kidney and caudal aspect of the caudate liver lobe.

Focal to intermittent mildly prominent to enlarged mesenteric lymph nodes were present. The lymph nodes were essentially isoechoic to adjacent omentum without evidence of peripheral inflammation and maintaining a normal width: length ratio (<0.5). An example of a lymph node measured 0.5 cm.

ULTRASONOGRAPHIC FINDINGS

- Hepatopathy-subjectively acute.
- Sonographically unremarkable gallbladder/CBD-no evidence of post-hepatic obstructive criteria.
- Mild hypomotile stomach with mild retained non-shadowing gastric ingesta/chyme, sonographically unremarkable small bowel.
- Subtle heterogenous pancreas, not sonographically consistent with consistent/active pancreatitis.
- Suspect scant free fluid between cranial right kidney and caudal right liver.
- Minor urinary bladder sediment.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Although non-specific the most likely etiology for the hepatopathy would be acute hepatitis (viral/bacterial/leptospirosis/toxin) with contributing factors including vacuolar hepatopathy, non-obstructive cholestasis or less likely, occult infiltrative round cell neoplasia.

Assuming normal clotting status a hepatic FNA for screening cytology is warranted for further assessment. A leptospirosis titer/PCR may be considered if clinically indicated or if potential exposure/endemic to the area.

Low grade pancreatitis as a contributing factor cannot be definitively excluded yet if present, pancreatitis did not appear to be a primary clinical factor.

Pending additional diagnostics, IVF, hepatosupportive medications +/- empirical antibiotic therapy with as needed GI support would be reasonable.

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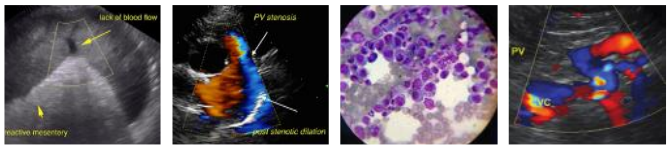

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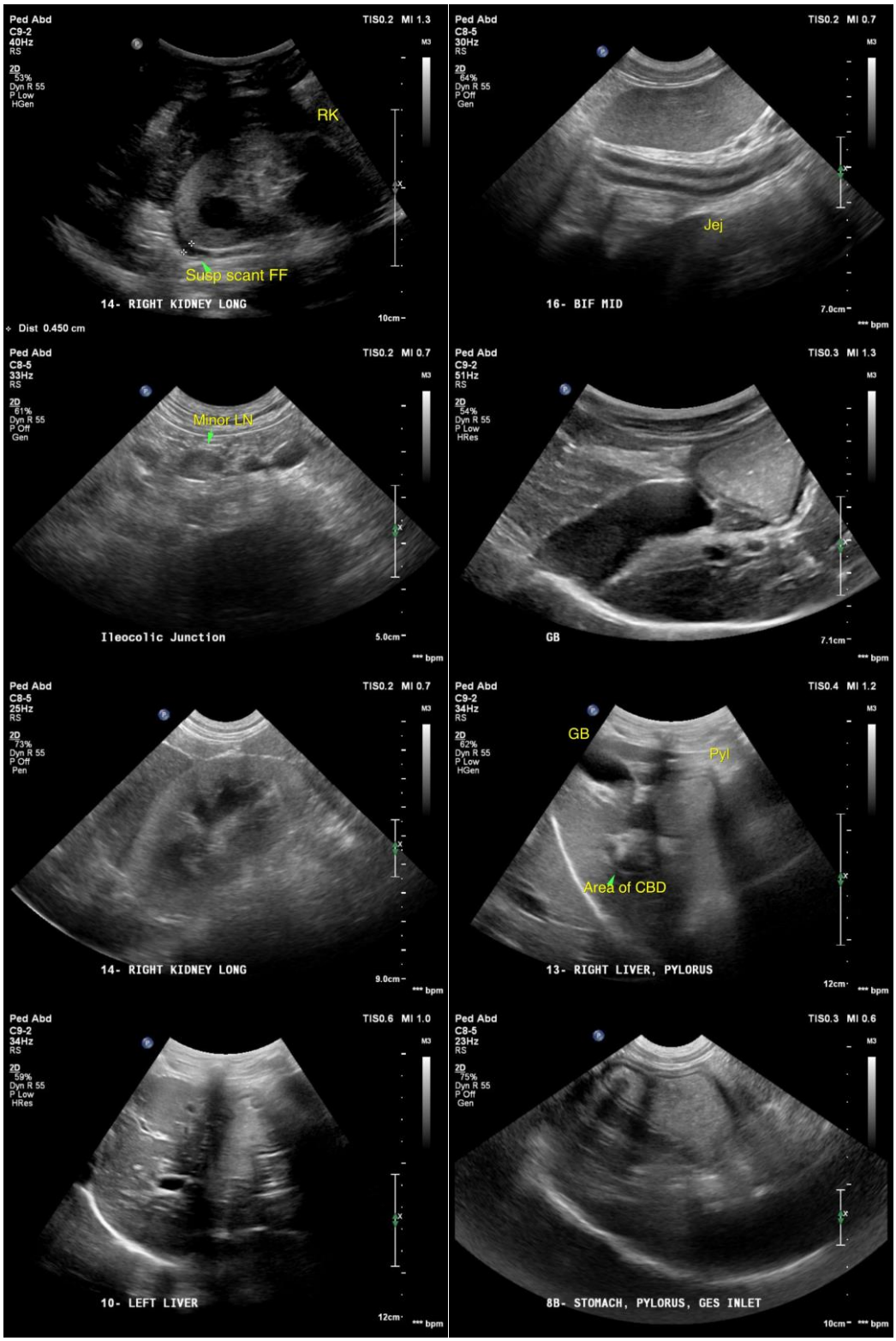
The urinary bladder sediment may suggest cellular / crystalline debris or mucus. Cystocentesis for UA +/- C/S if evidence of inflammatory cells is recommended.



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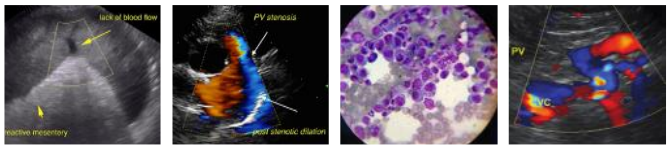

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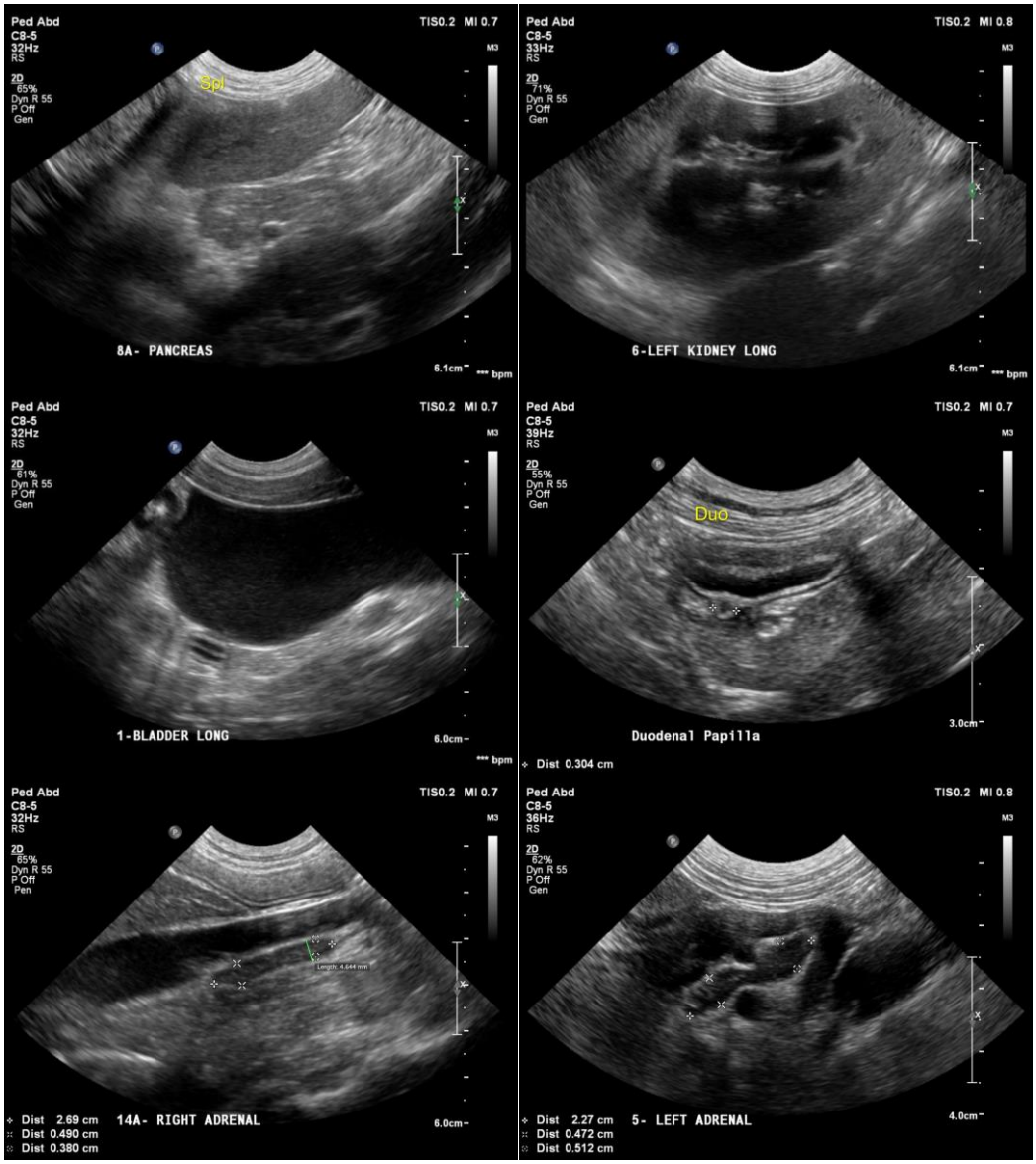

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

R. McKenzie Daniel, DVM, DABVP (Canine/Feline Practice)
mac.daniel@sonopath.com