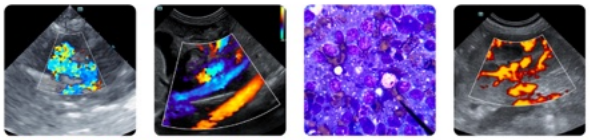

PATIENT

Leo Spolla

SPECIES

Canine

BREED

Shih Tzu Mix

SEX

Neutered male

AGE

12 years

WEIGHT

6.0 kg

INTERPRETED BY

Eric Lindquist, DMV DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Dr. Henderson

HOSPITAL NAME

Riverside Small AH

REFERRING VET

Dr. Carrigan

INVOICE

68372

DATE

11/5/25

PRESENTING CLINICAL SIGNS

History: pre-anesthetic bloodwork done to complete dental procedure. Marked elevation of ALT and ALP. Recommended bile acids and abdominal ultrasound. Ultrasound completed and FNA's done of the liver
High ALP and ALT markers Bile Acids: abnormal attached histology report for the FNA of the liver.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The **urinary bladder**, trigone, and pelvic urethra presented normal thicknesses and normal tone. The ureters were not visible which is normal. No uroliths or sediment were visualized and anechoic urine was present. No evidence of inflammatory or neoplastic changes was noted. Ureteral papillae were normal.

The **kidneys** revealed normal size and structure, corticomedullary definition and ratio for this age. The cortices presented largely uniform texture with normal echogenic relationship to liver and spleen. Medullary structure differed distinctly from the cortex and no evidence of pelvic dilation was present. The capsules were acceptably uniform without significant irregularities. The right kidney measured 4.0 cm with microcystic change. The left kidney measured 4.4 cm.

The residual prostate measured 0.5 cm.

Adrenal Glands

Both **adrenal glands** were visualized and recognized as having normal shape, size, position and echogenicity for this breed. The phrenic vasculature, glandular echogenicity and detail were unremarkable. Capsule, cortex, and medullary definition were normal for this age patient. The right adrenal gland measured 0.61 cm at the caudal pole and 0.1 cm at the cranial pole and 2.6 cm in length. The left adrenal gland measured 0.6 cm at the caudal pole and 0.5 cm at the cranial pole.

Spleen

The **spleen** revealed an expansive irregular nodule/mass that measured 1.6 cm with cystic changes and pericapsular inflammatory pattern. A separate hypoechoic splenic nodule was noted.

Liver

The **liver** revealed uniform enlargement and hypoechoic nodular changes. The largest nodule measured 1.6 x 0.94 cm. The gallbladder was mildly over distended with suspended and dependent debris, yet not to the level of emerging mucocele, yet sludge appears to be mildly excessive. No adjunctive inflammation was noted.

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Gastrointestinal

Examination of the **gastrointestinal tract** revealed a stomach and intestine free of stasis, of normal wall thickness, acceptable curvilinear mural detail, and peristaltic activity. Small and large intestine demonstrated normal luminal chyme and stool consistency respectively. No obstructive or overt infiltrative disease was noted. No associated abnormal lymphatic activity was noted.

Pancreas

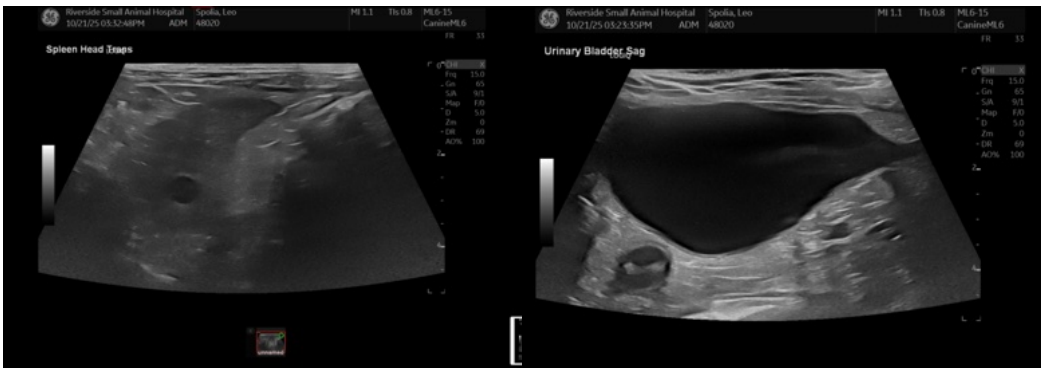
The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Some parenchymal remodeling, however, with mild deviation from curvilinear normalcy was observed. Hyperechoic lipid plaques were noted. Pancreatic duct and capsular irregularities were present consistent with age related changes. If pain upon imaging (+ Murphy sign) was present or if the patient is focally painful in subxiphoid palpation then low-grade smoldering chronic pancreatitis should be suspected.

ULTRASONOGRAPHIC FINDINGS

- Undefined splenic mass and nodule.
- Hepatic nodules.
- Chronic pancreatic changes.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

25-gauge FNA of both splenic lesions would be recommended. 25 or 22-gauge FNA of the liver nodules is recommended to assess for metastatic disease versus independent nodular hyperplasia. Alternatively direct splenectomy with liver inspection and biopsy could be performed after chest radiographs and screening echocardiogram for metastatic disease. Hemangiosarcoma is a strong potential. Benign hyperplasia is possible, yet less likely. Round cell neoplasia is unlikely. The splenic lesions appear precarious and fairly aggressive, yet subjectively isolated to the spleen at the time of the sonogram.



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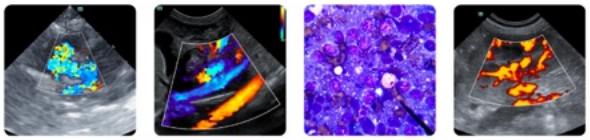

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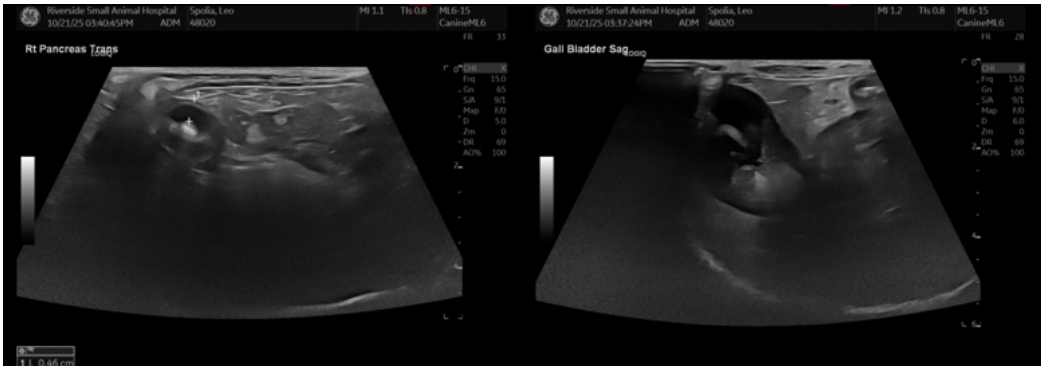

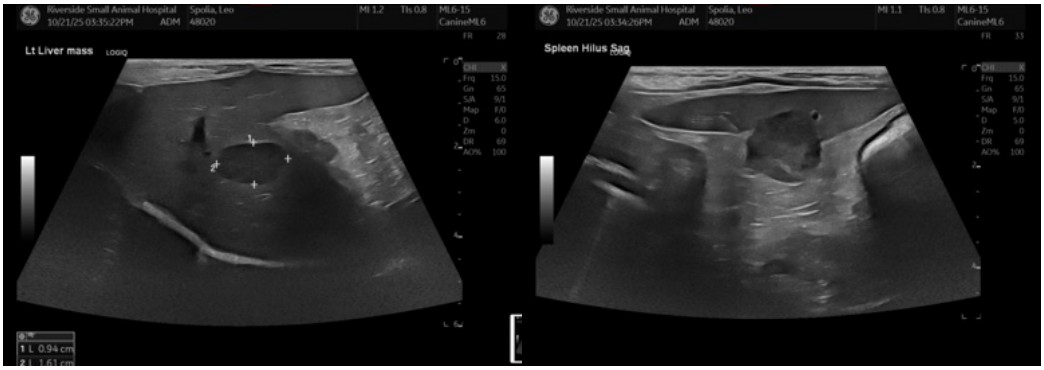

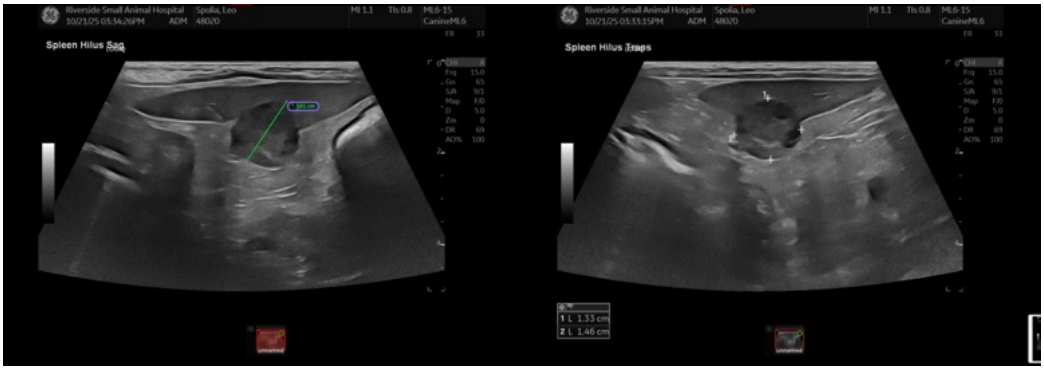

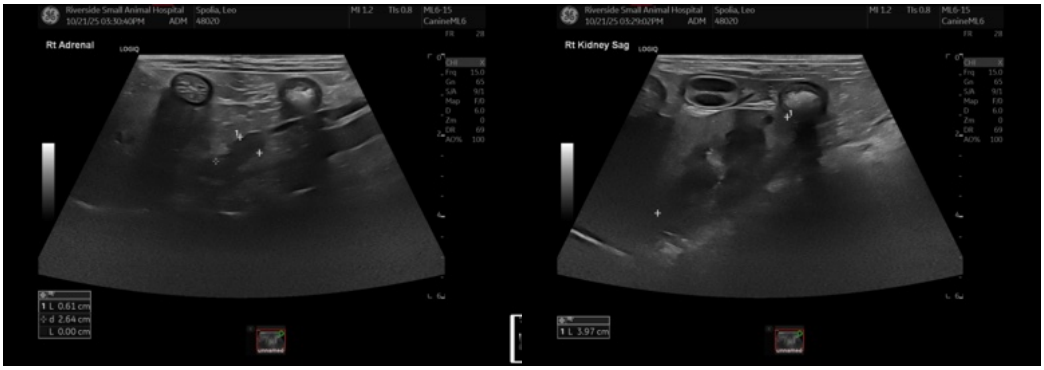

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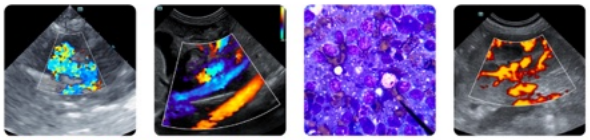

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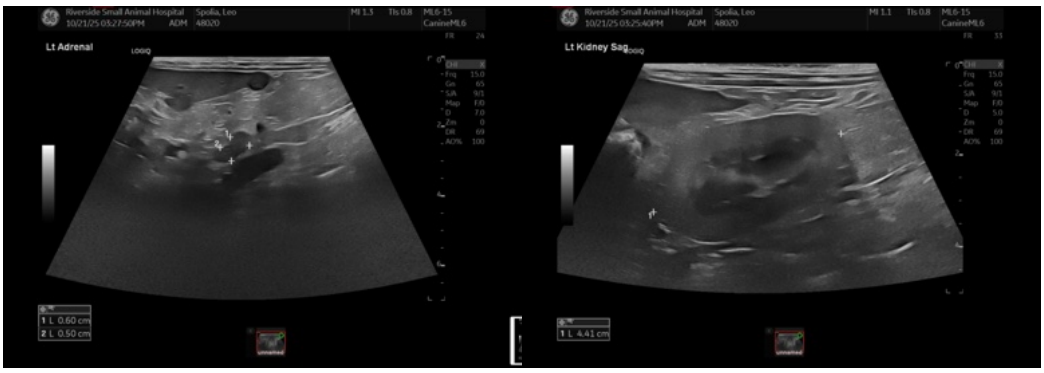

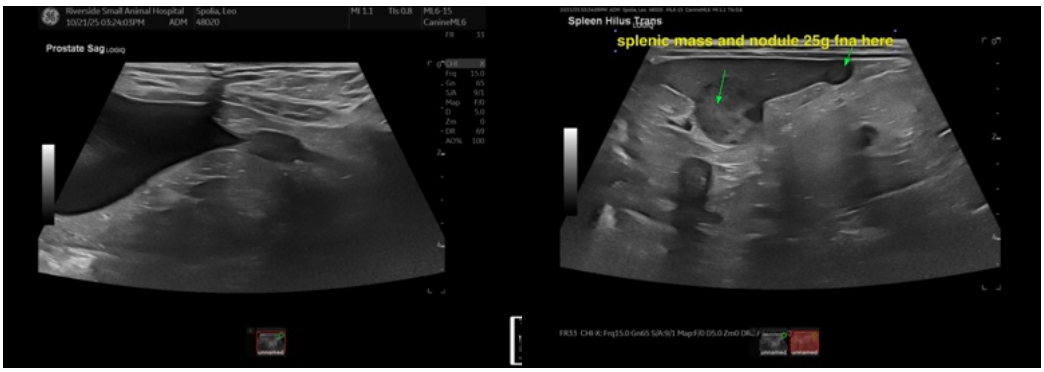

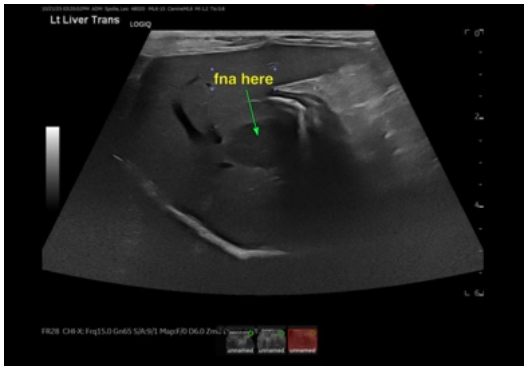

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Eric Lindquist, DMV, DABVP (CFM), Cert. IVUSS, CEO of SonoPath.com

info@SonoPath.com