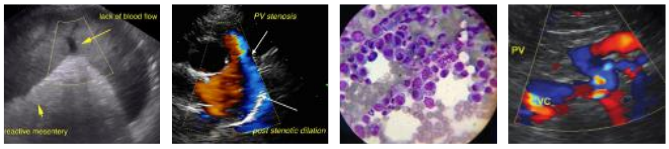
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



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

PATIENT

Daisy Hug

SPECIES

Canine

BREED

Shih Tzu Mix

SEX

Spayed Female

AGE

12 Years

WEIGHT

NA

INTERPRETED BY

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

IMAGING PERFORMED BY

Kelly Vazquez

HOSPITAL NAME

Parsippany AH

REFERRING VET

Dr. Linda Dulude

INVOICE

14792

DATE

4/15/22

PRESENTING CLINICAL SIGNS

History: Owner trying to decide if should do cataracts surgery - looking for cancer. No current meds.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The ventral apical to dorsal apical bladder wall was mildly thickened. The apical urinary bladder wall measured 0.47 cm width. The urethra was normal to a depth of 3.0 cm. Mild asymmetrical luminal surface to micropolypoid changes were present likely associated with age related mural changes. Anechoic urine was present in the lumen with no uroliths or sediment. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes were noted. Aortic trifurcation was normal.

Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio was maintained. The medulla and cortices were uniform in texture with some increased echogenicity and mild loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. The left kidney measured 3.5 cm in length. The right kidney measured 4.4 cm in length. Focal areas of mild dystrophic mineral were present in the right kidney.

Adrenal Glands

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.57 cm width at the caudal pole and 0.48 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 0.50 cm width at the caudal pole and 0.83 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.

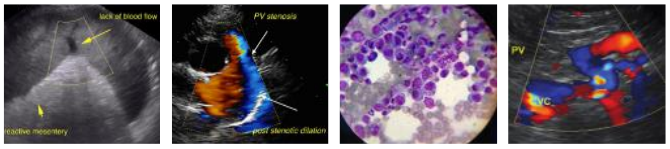
Liver

The liver was subjectively normal in size, structure, and contour. The liver parenchyma was mildly nonuniform and hypoechoic to the spleen with a moderate coarse echotexture and subjective mild to benign parenchymal remodeling. The hepatic and portal vasculature were normal in appearance without signs of congestion. Nonspecific, nondisruptive variable echogenic intraparenchymal nodules were noted in the mid to deep liver. An example of isoechoic to nonhomogeneous nodule in the mid liver, measured 2.3 cm in diameter. An example of a well-demarcated mildly hyperechoic nodule in the deep mid liver measured 1.5 cm in diameter. The nodules did not distort the hepatic capsule.

The gallbladder was non-distended in size with thin walls and primarily anechoic luminal content. The cystic and common bile ducts were normal.

Gastrointestinal

The stomach exhibited primarily intact and sonographically unremarkable wall layering. A focal area of symmetrical mixed echogenic mucosa hypertrophy was present in the dorsal aspect of the stomach,



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measuring approximately 2.0 cm in diameter. Potential for emerging mineralization associated with this focal area of mucosa hypertrophy possible, although not definitive.

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.

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

Pancreas

The left pancreas exhibited subtle prominent size and hypoechoic parenchyma with surrounding reactive mesentery. The right pancreatic limb was normal in size and contour with mildly heterogeneous yet isoechoic parenchyma.

Free Abdomen

No overt lymphadenopathy or peritoneal effusion was present.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Nonspecific, variably echogenic hepatic intraparenchymal nodules
- Focal, mixed echogenic, potentially mineralized gastric mucosal hypertrophy
- Mildly prominent to hypoechoic left pancreas with mild regional peripancreatic reactive mesentery- possible low-grade to chronic active pancreatitis

Secondary Findings

- Possible mild cystitis
- Bilateral mild chronic renal changes with minor right kidney medullary mineral

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The variably echogenic hepatic nodules were nonspecific with considerations, including suspected nodular to regenerative hyperplasia, small lipogranulomas or hematopoiesis. Neoplastic criteria is thought less likely yet cannot be definitively excluded.

The focal gastric mucosal hyperplasia, exhibiting mixed echogenicity and potential for emerging mineralization may indicate focal chronic mucosal hyperplasia, gastritis, atypical polyp, granuloma, with emerging neoplastic criteria thought less likely.

Further assessment may include hepatic nodule FNA, assuming normal clotting status, for screening cytology, and/or gastric endoscopy for gross inspection of the mucosal hypertrophy +/- biopsy. Correlation of the pancreatic presentation with a Spec CPL could be considered. Sonographic monitoring of the hepatic nodules and focal gastric mucosal hypertrophy would be a more conservative approach.

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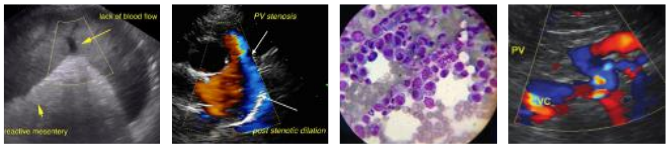

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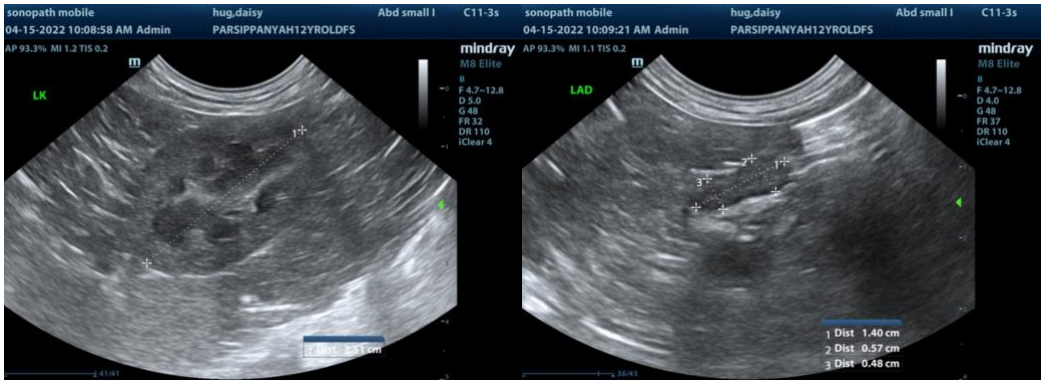

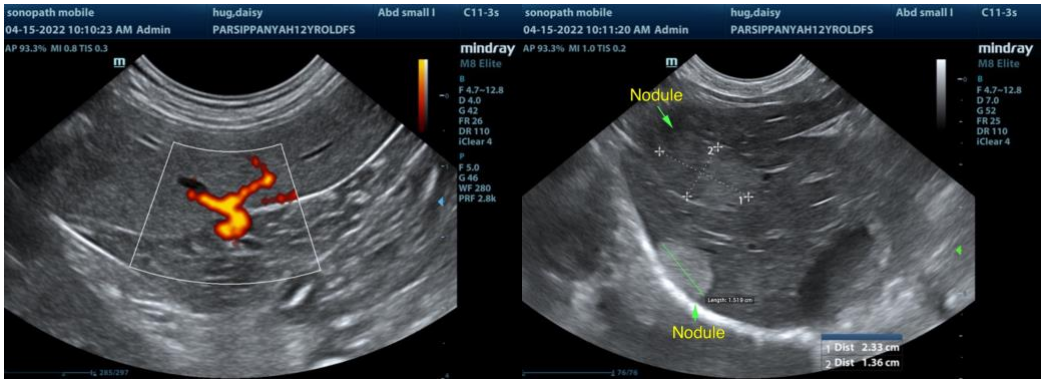

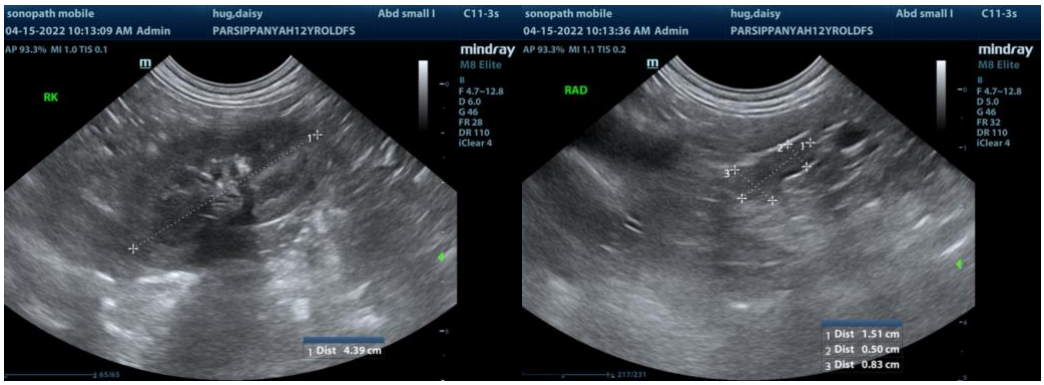

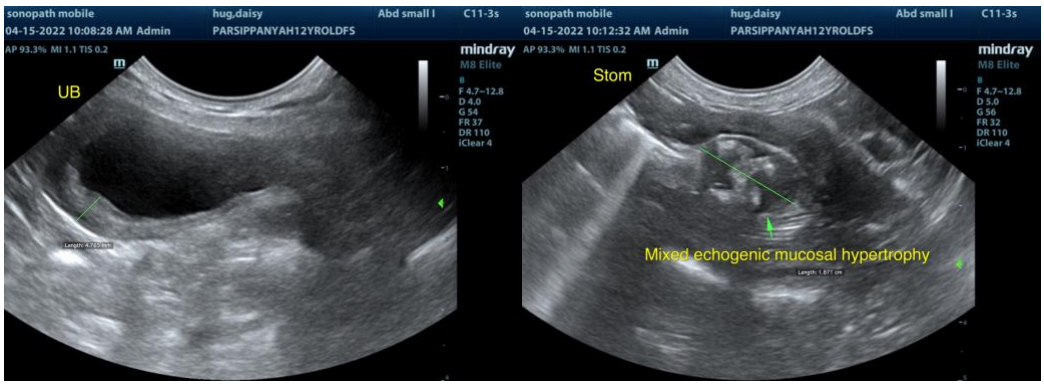

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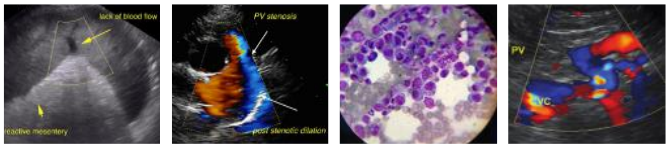

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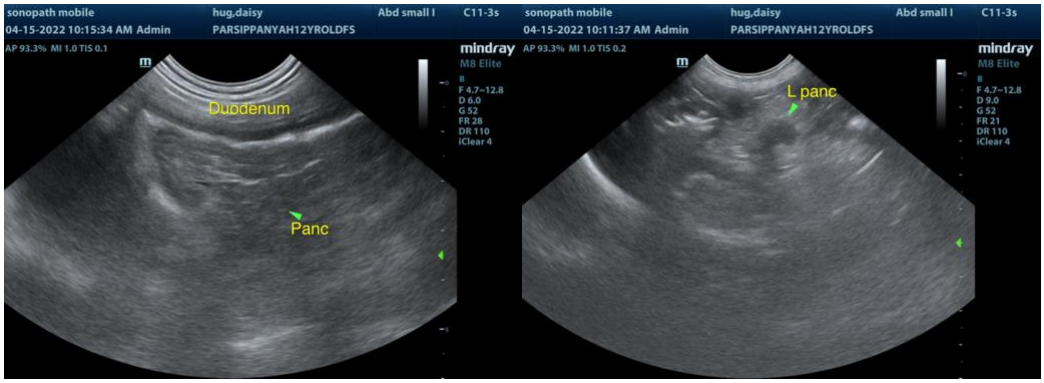

The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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)
info@SonoPath.com