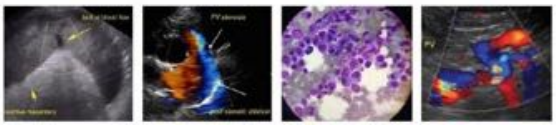


PATIENT

Dkit Shanmugarasa

SPECIES

Canine

BREED

Maltese

SEX

Neutered Male

AGE

13 years

WEIGHT

7 lbs

INTERPRETED BY

Andrea Nicastro, DVM, Diplomate ACVIM (*Small Animal Internal Medicine*)

IMAGING PERFORMED BY

Kelly Reschny

HOSPITAL NAME

Lakeshore Woods AH

REFERRING VET

Masoud

INVOICE

12735

DATE

4.10.23

PRESENTING CLINICAL SIGNS

History: blindness, distended abdomen, dehydrated, very lethargic, general weakness. pain during palpation of the spines Current Medications Aventi Kidney, liquid gabapentin

Abnormal PE/Chem/CBC/UA Results: bloodwork was performed with another clinic and indicated azotemia , hyperphosphatemia , elevated liver enzymes, hypokalemia CPLI: wnl SDMA : pending rad enlarged liver R/o neoplasia vs Cushing vs fatty liver recommended IVF fluid therapy , abd. ultrasound Radiographic Findings enlarged liver, distended stomach, GIT gas pattern, suspected soft tissue mass in the mid abdomen, discospondylosis

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder and visible portion of the pelvic urethra are normal for the degree of luminal distension. The urine is anechoic with no evidence of debris. Cystic calculi and discrete masses are not observed. The region of the trigone and visible portion of the proximal urethra are normal.

The prostate is normal in size (0.78 cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

The left kidney is normal in size (4.68 cm in length) with a slightly irregular shape. The cortex is isoechoic relative to the spleen. A few cortical cysts are observed. There is mild to moderate loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. Mild pyelectasia is present (0.28 cm in the longitudinal plane). There is no evidence of infarcts or hydronephrosis. Renal vasculature is normal.

The right kidney is normal in size (4.58 cm in length) with a slightly irregular shape. The cortex is isoechoic relative to the spleen. A few cortical cysts are observed. There is mild to moderate loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. Trace pyelectasia is present. There is no evidence of infarcts or hydronephrosis. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is enlarged (0.88 cm at cranial pole) (0.66 cm at caudal pole) (1.80 cm in length) with a slightly irregular shape. The parenchyma is subtly heterogenous with some loss of glandular detail. The phrenicoabdominal vein and surrounding vasculature are normal.

One still image of the right adrenal gland is available for interpretation. The gland is enlarged (1.22 cm at cranial pole) (0.73 cm at caudal pole) (1.88 cm in length) with a slightly irregular shape. The parenchyma is subtly heterogenous with some loss of glandular detail. The phrenicoabdominal vein and surrounding vasculature are normal.

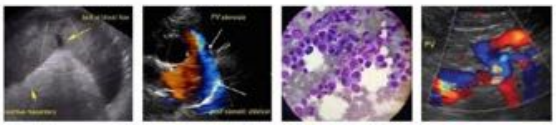
Spleen

The spleen is normal in size (0.86 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. Pinpoint hyperechoic foci are observed throughout the organ. Splenic vasculature appears normal.

Liver

The liver is subjectively prominent in size with normal curvilinear peripheral contours. The parenchyma is isoechoic relative to the spleen and subtly mottled in appearance. No distinct focal lesions are observed. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion.

The gall bladder is distended. The wall is variably thickened (up to 0.94 cm), irregular and hyperechoic, with polypoid-like lesions arising from the luminal surface. A small amount of echogenic debris is also observed within the lumen, as well as a 1.17 cm irregular cholelith. The cystic and common bile duct



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walls are diffusely thickened. The lumens are diffusely dilated (up to 0.53 cm) and can be followed to the level of the duodenal papilla, which is enlarged (0.6 cm in width). There is no obvious evidence of an intraluminal obstruction.

Gastrointestinal

The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is not distended. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The pyloric outflow tract is patent. The small intestinal lumen is not dilated. The small intestinal wall is normal in thickness with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. There is no evidence of an obstructive pattern.

Pancreas

The right limb is prominent to enlarged with slightly irregular peripheral contours. The parenchyma is isoechoic to hyperechoic relative to surrounding omental fat and heterogenous in appearance, with several, small hypoechoic nodules. The pancreatic duct is not overtly dilated.

Free Abdomen

The peritoneal cavity is normal. There is no evidence of inflammation or effusion. The abdominal lymph nodes are normal/not visible.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- The gall bladder/cystic/common bile duct changes re most consistent with cholecystitis/cholangitis with a lower possibility of infiltrative neoplasia.
- Nonspecific diffuse hepatopathy. Differentials include vacuolar hepatopathy, regenerative nodular hyperplasia, inflammatory disease, hepatotoxicosis (i.e., copper), or other hepatopathy.
- Bilateral chronic age-related renal changes with dystrophic mineralization, cortical cysts and mild pyelectasia

Secondary Findings

- Mild bilateral adrenomegaly
- The pancreatic changes are most consistent with pancreatic remodeling/fibrosis with benign nodular hyperplasia. A prior episode of pancreatitis or chronic pancreatitis are also possible.
- Splenic dystrophic mineralization. This is likely a benign incidental finding and can be associated with endocrinopathies.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Regarding the azotemia, consider the following:

1. Urinalysis
2. Urine culture and sensitivity
3. UPC (if proteinuria is present in the absence of infection)
4. Baseline blood pressure measurement
5. Fluid therapy as needed

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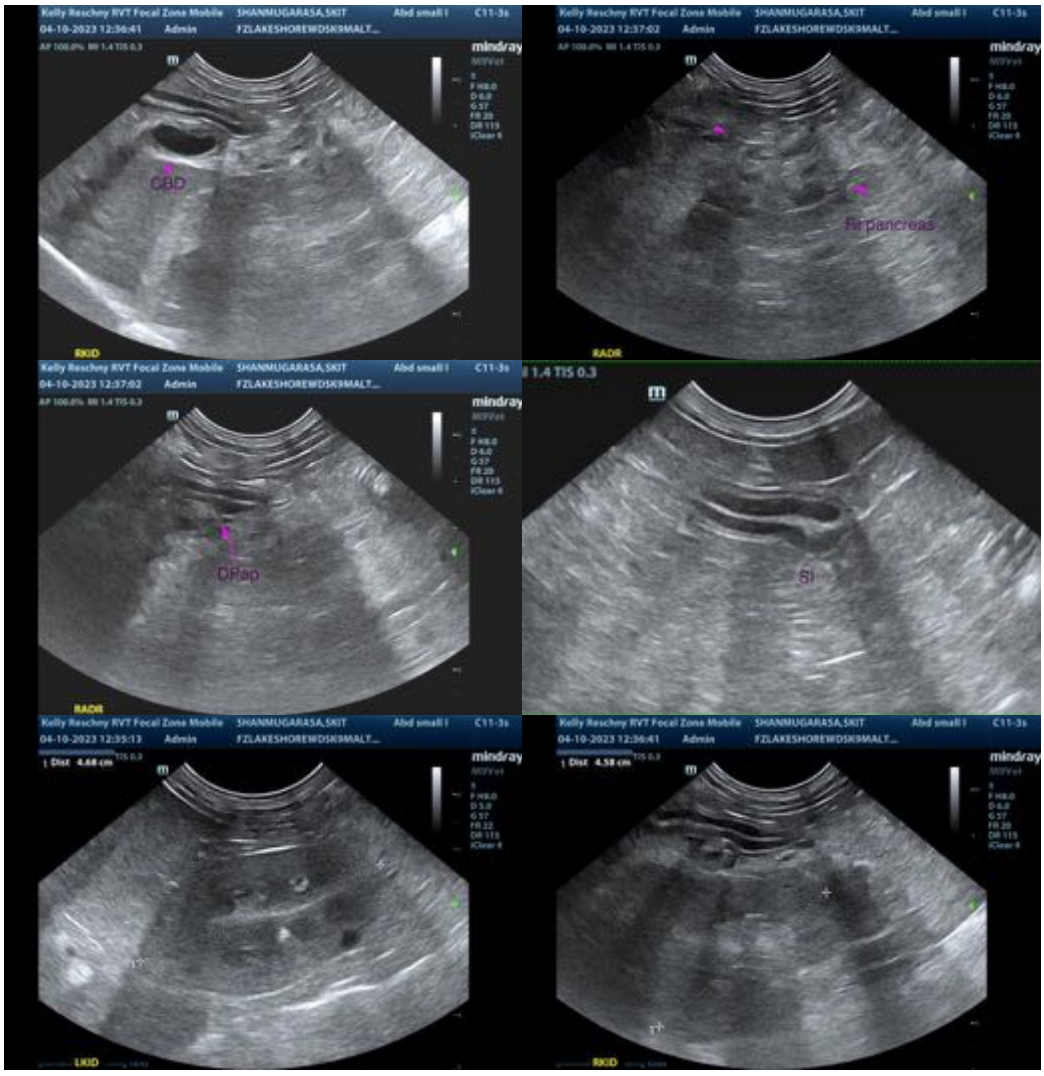
6. Serial monitoring of the renal values is recommended to assess for progression of azotemia.

- Regarding the elevated liver values, the enzyme pattern should dictate diagnostics. If the ALT is substantially increased, consider pre-and postprandial serum bile acids, Leptospirosis testing and hepatic tissue sampling (i.e., fine-needle aspirate or biopsies). If the ALP is disproportionately elevated relative to the ALT, consider further testing for Cushing's Disease (i.e., low-dose dexamethasone suppression test or ACTH stimulation test).



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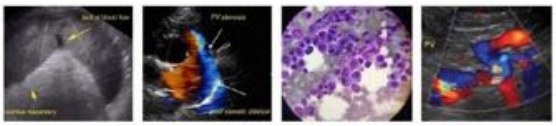

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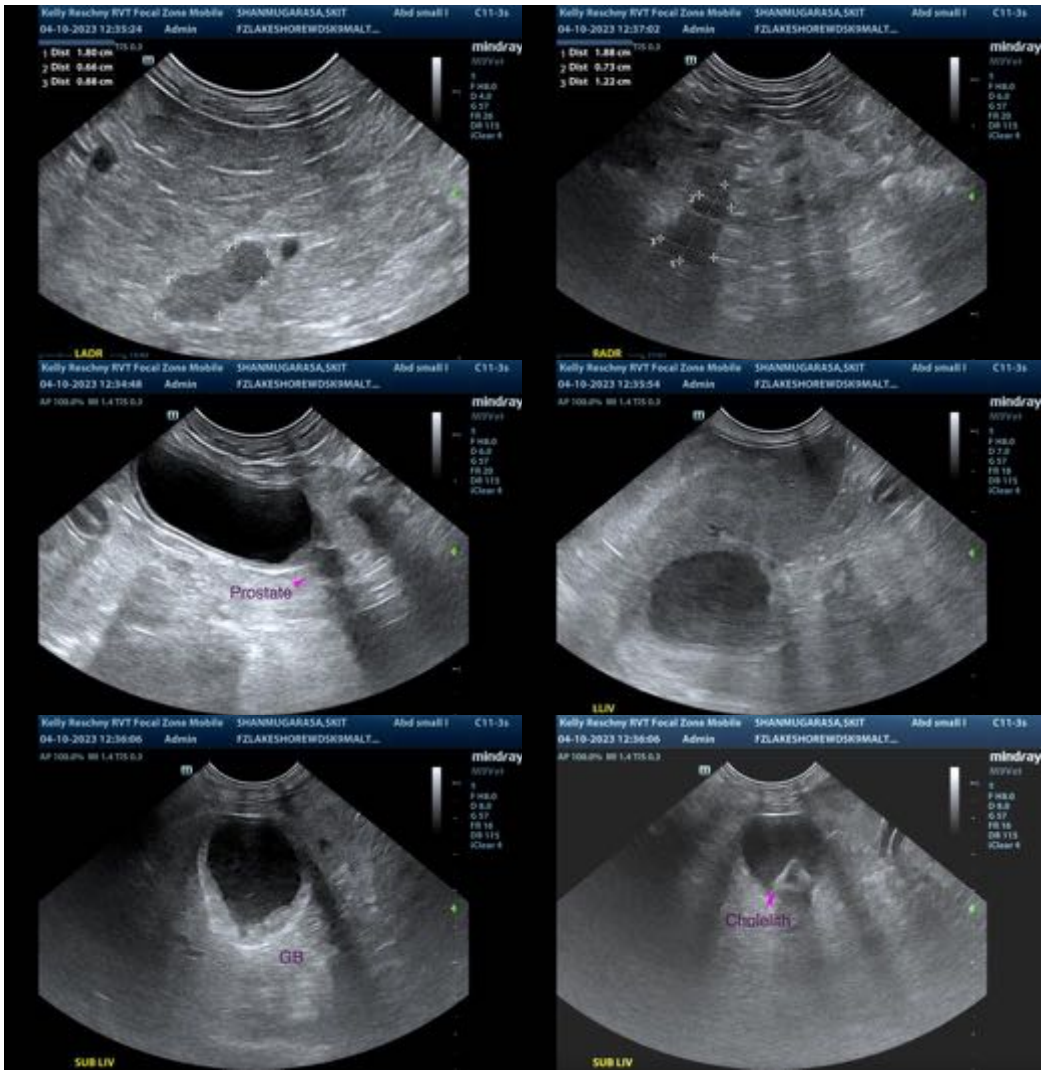

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.
Andrea Nicastro, MPH, DVM, Diplomate DACVIM (Small Animal Internal Medicine)
info@SonoPath.com