**DATE PRESENTING CLINICAL SIGNS**

1/28/2022

History: Acute hematuria. Brief scan of bladder with US showed possible mass within the bladder. Hx of grade III/VI heart murmur- recently seen by cardio (mitral and tricuspid regurg. mild L heart enlargement). Obese.

PATIENT

Katie Corelli

Current Medications: Pimobendan 5mg BID, Enalapril 5mg BID.

Lab Results: UA: WBCs and RBCs > 50/HPF.

Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

SPECIES

Canine

BREED

Imaging Performed By: Andi Parkinson, RDMS.

Terrier Mixed Breed

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**SEX**

Female Spayed

Urinary System

The urinary bladder is mildly distended. The wall in the region of the apex is moderately to severely thickened, up to 0.95 cm, irregular and slightly heterogenous in appearance. The wall tapers to a normal thickness as it extends toward the urinary bladder neck. A small amount of mineralized sand versus tiny calculi is observed within the lumen as well as suspended echogenic to mineralized debris. The region of the trigone and the visible portion of the proximal urethra are normal.

AGE

1-4-2010

WEIGHT

48.7 Lbs.

The left kidney is normal in size (6.09 cm in length) with a normal shape, smooth peripheral margins, and normal internal architecture. The cortex is hyperechoic. There is mild loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis.

INTERPRETED BY

Andrea Nicastro, DMV,
Diplomate DACVIM
(Small Animal
Internal Medicine)

The right kidney is normal in size (6.11 cm in length) with a normal shape, smooth peripheral margins, and normal internal architecture. The cortex is hyperechoic. There is mild loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis.

HOSPITAL NAME

Timonium Animal
Hospital

Adrenal Glands

The left adrenal gland is mildly enlarged (0.51 cm at cranial pole) (1.10 cm at caudal pole) (2.97 cm in length); with a slightly irregular shape. A 1.74 x 1.11 cm irregular hyperechoic to heterogenous nodule is observed at the caudal pole. The glandular echogenicity and detail at the cranial pole are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

REFERRING VET

Dr. Montessi

The right adrenal gland is prominent in size (1.25 cm at cranial pole) (0.61 cm at caudal pole) (3.01 cm in length); with a slightly irregular shape. A 1.37 x 1.06 cm hyperechoic to slightly heterogenous nodule is observed at the cranial to mid-aspect. The glandular echogenicity and detail at the caudal aspect are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

INVOICE

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Spleen

The spleen is normal in size (2.10 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

Liver

The liver is subjectively prominent in size with swollen curvilinear peripheral contours. The parenchyma is isoechoic relative to the spleen and exhibits mild heterogeneity. No distinct focal lesions are

observed. Hepatic vasculature and biliary tracts are of normal volume with no evidence of congestion. The portal vein to caudal vena cava ratio is approximately normal 1:1.

The gall bladder lumen is moderately distended. The wall is thin and smooth. A small amount of aggregated echogenic partially dependent debris is observed within the lumen. The cystic and common bile ducts are normal.

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 small intestinal lumen is not dilated. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural detail. Discrete masses are not identified. The colonic wall is normal. No obstructive or overt infiltrative disease is noted.

Pancreas

The right limb of the pancreas is visible with normal curvilinear peripheral contours. The parenchyma is largely isoechoic relative to surrounding omental fat and slightly mottled in appearance. The pancreatic duct is visible but not overtly dilated. There is no evidence of peripancreatic inflammation or effusion.

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 urinary bladder wall changes are most consistent with severe cystitis. However, infiltrative neoplasia (i.e., transitional cell carcinoma), cannot be excluded. Urinary bladder sand versus calculi within the lumen.

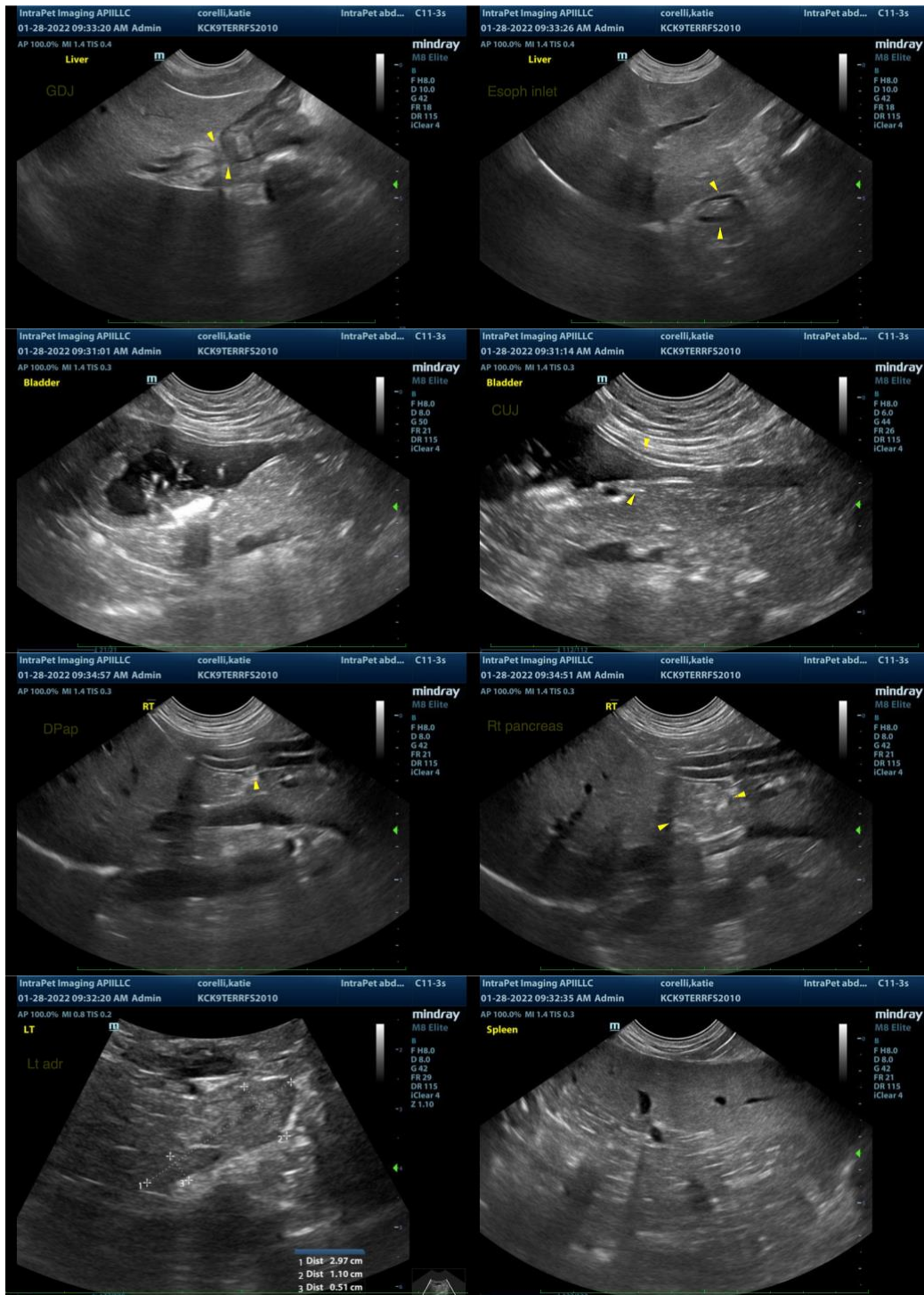
Secondary Findings

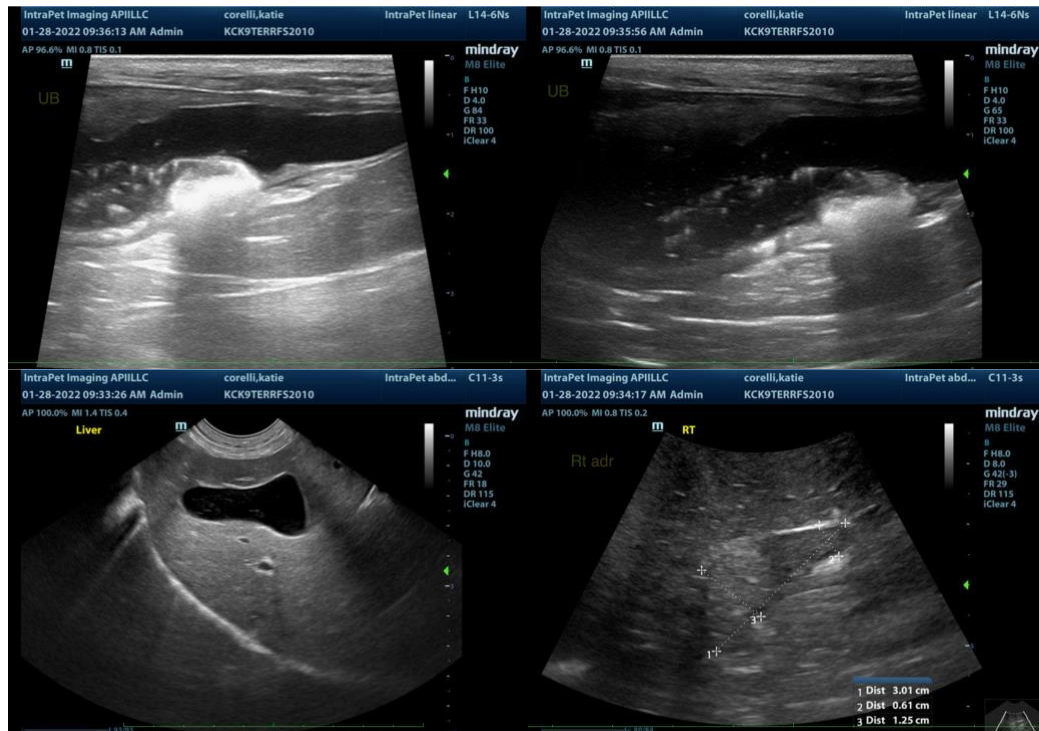
- Bilateral degenerative renal changes with dystrophic mineralization. The bilateral adrenal nodules trend toward the benign (i.e., nodular hyperplasia), with a lower possibility of emerging tumors.
- The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, regenerative nodular hyperplasia, and/or age-related remodeling. Inflammatory and infiltrative disease are considered less likely.
- The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- A cystotomy with stone removal, analysis and culture is recommended. A biopsy of the thickened portion of the bladder wall should also be obtained. Alternatively, medical dissolution of the stones can be considered with a prescription renal diet and broad-spectrum antibiotic therapy. If there is no improvement in stone size after 4 weeks of therapy, a cystotomy should be reconsidered. If the stone size is reduced, continue therapy until complete dissolution has been achieved.

- If the patient is to undergo surgery, three-view thoracic radiographs and baseline blood work including a CBC chemistry panel urinalysis and T4 are recommended to assess cardiopulmonary status and overall metabolic function, respectively, prior to anesthesia.





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