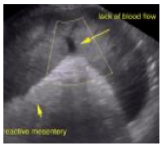
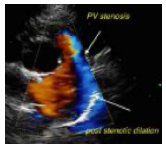
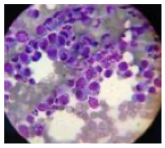
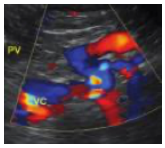
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

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

PATIENT
Gracie Allman

SPECIES
Canine

BREED
Beagle

SEX
Spayed Female

AGE
12 years

WEIGHT
32.8 lbs

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

IMAGING PERFORMED BY
Kelly Vazquez

HOSPITAL NAME
Animal General on Hudson

REFERRING VET
Dr. Daniel Tierney

INVOICE
11635

DATE
9.14.22

PRESENTING CLINICAL SIGNS

History: Blood work shows increased ALP. Patient seems to be polydipsic. Current meds: Cytopoint, heartworm preventative, flea & tick.
Abnormal PE/Chem/CBC/UA Results: ALP 463. U/A: protein 2+, blood 1+, USG 1.011.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The **urinary bladder** is mildly distended with anechoic urine. The wall is diffusely thickened (up to 0.45 cm) and irregular. No cystic calculi are observed. The region of the trigone is normal. The proximal urethra, visible to a depth of 2-3 cm, is normal to slightly thickened. The urethral lumen is not dilated.

The **left kidney** is normal size (5.1 cm in length); normal shape and architecture with smooth peripheral margins. The cortex is mildly thickened and there is mild loss of corticomedullary distinction. The cortex is hyperechoic. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The **right kidney** is normal size (5.02 cm in length); normal shape and architecture with smooth peripheral margins. The cortex is mildly thickened and there is mild loss of corticomedullary distinction. The cortex is hyperechoic. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The **left adrenal gland** is mildly enlarged (0.48 cm at cranial pole) (0.71 cm at caudal pole) (2.30 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

The **right adrenal gland** is normal size (0.45 cm at cranial pole) (0.52 cm at caudal pole) (2.59 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

Spleen

The **spleen** is normal in size (1.42 cm in width at the level of the hilus) with a normal capsular contour. The parenchyma is subtly mottled in appearance. A 0.61 x 0.36 cm ill-defined, hypoechoic nodule/area is observed at the caudomedial aspect. Splenic vasculature is normal.

Liver

The **liver** is subjectively enlarged with swollen peripheral contours. The parenchyma is isoechoic relative to the spleen and diffusely heterogenous in appearance. An approximately 3.50 cm irregular, isoechoic to mildly heterogenous mass/area is observed deep on the right side, adjacent to the diaphragm. In addition, a 1.18 cm irregular hyperechoic nodule is also observed on the right. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion. The portal vein to caudal vena cava ratio is approximately 1: 1.

The **gall bladder** lumen is moderately distended. The wall is thin and smooth. Luminal contents are anechoic. The cystic and common bile ducts are normal/not seen.

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 thickness is normal 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 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 right hepatic mass/lesion could be consistent with an emerging tumor (i.e., adenoma, adenocarcinoma). Alternatively, a benign process (i.e., regenerative nodular hyperplasia) may be present. The diffuse hepatic parenchymal changes trend toward the benign (i.e., regenerative nodular hyperplasia and/or vacuolar hepatopathy), with a lower possibility of inflammatory or infiltrative disease.

- The mild left adrenomegaly may be secondary to hyperplastic change or may be a normal variant for this patient.

Secondary Findings

- Minor age-related pancreatic remodeling

- The bilateral renal changes are most consistent with chronic interstitial nephrosis/nephritis.

- The urinary bladder wall changes are suggestive of cystitis. However, some of the wall thickening may be secondary to lack of full repletion. Correlation with the patient's urinalysis and clinical history is recommended.

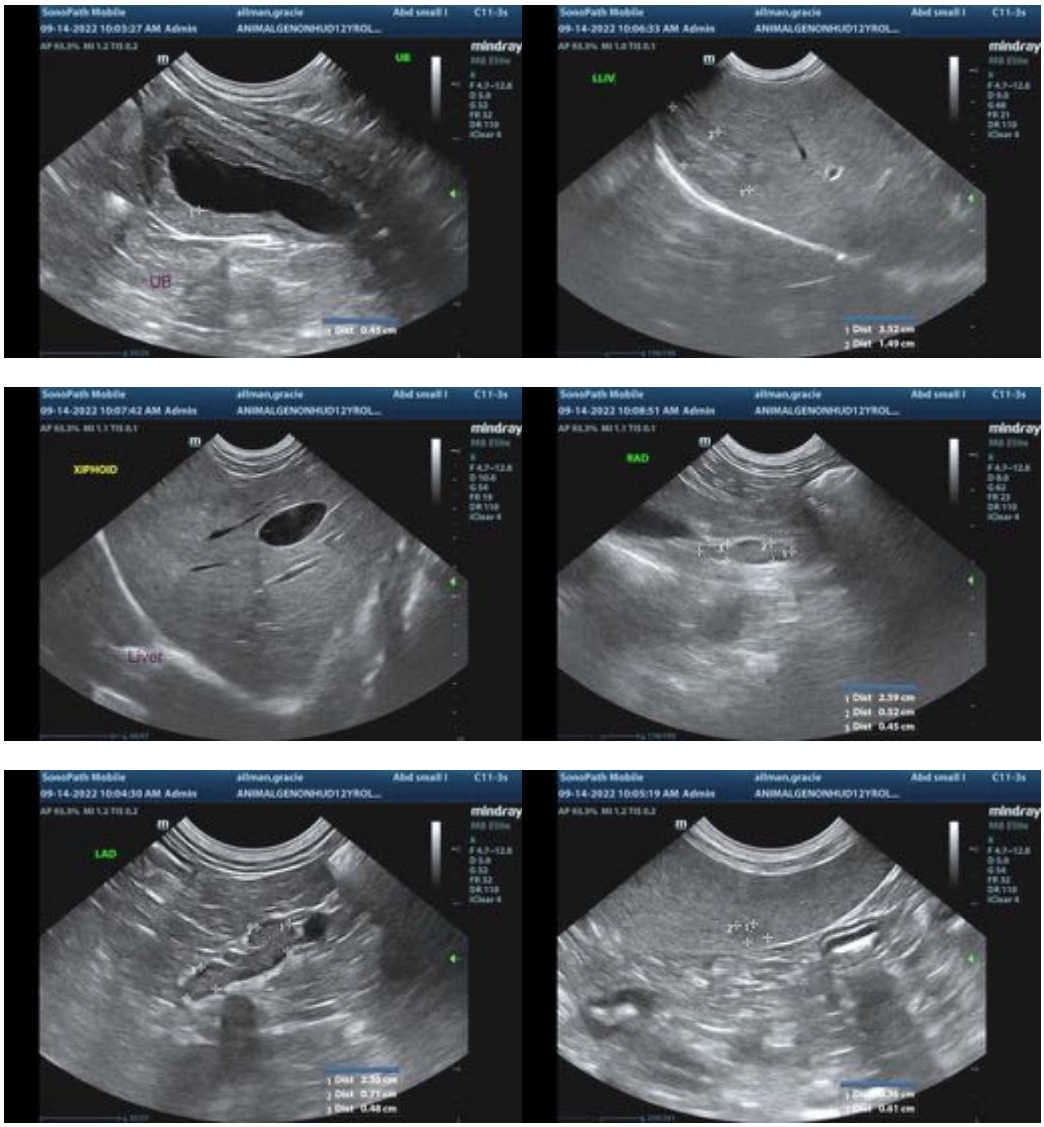
- The splenic parenchymal changes are most consistent with a benign process such as lymphoid hyperplasia, extramedullary hematopoiesis, splenitis or antigenic stimulation with a low possibility of infiltrative neoplasia (i.e., lymphoma, mast cell neoplasia).

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

If accessible, consider a fine-needle aspirate of the right hepatic lesion (if clotting status is appropriate). If the lesion is not accessible or if cytology results are inconclusive, consider either surgical biopsy or a repeat ultrasound in 4-6 weeks to assess for growth. The liver enzymes should also be monitored (i.e., every 3-4 months) to assess for further increases.

If the patient is overtly clinical for Cushing's Disease, consider further testing (i.e., low-dose dexamethasone suppression test or ACTH stimulation test) if clinical signs (i.e., PU/PD) develop.

Given the proteinuria, a UPC is recommended. Also consider a urine culture and sensitivity to assess for occult infection.



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