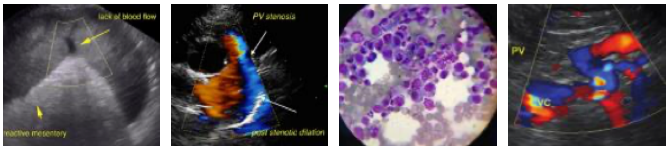
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



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

PATIENT
Autumn Cifaretto

SPECIES
Canine

BREED
Mixed breed

SEX
Female, spayed

AGE
6 Yrs.

WEIGHT
68 lbs.

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

IMAGING PERFORMED BY
Jessica Millier

HOSPITAL NAME
ACC Flanders

REFERRING VET
Dr. Halihan

INVOICE
13421

DATE
5/24/22

PRESENTING CLINICAL SIGNS

History: Elevated Alk Phos, LDDS normal, Urine Cortisol: Creat Ratio normal. Current meds: carprofen 100mg 1/2t BID, Gabapentin 300mg 1C BID PRN
Abnormal PE/Chem/CBC/UA Results: Alk Phos 2822, Ca 11.5, Precision PSL 212 UA: Upc hz 1.1, Prot +3 SG: 1.025

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended with anechoic urine. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

The left kidney is normal size (7.31 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild loss of corticomedullary distinction. Trace pyelectasia is present. There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney is normal size (8.50 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild loss of corticomedullary distinction. Trace pyelectasia is present. There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal size (0.52 cm at cranial pole) (0.59 cm at caudal pole) (2.78 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 (0.91 cm at cranial pole) (0.79 cm at caudal pole) (3.40 cm in length) with a slightly irregular shape. A 0.70 x 0.61 cm hyperechoic nodule is observed in the mid to caudal aspect. The lesion causes slight capsular expansion. The remaining glandular echogenicity and detail are unremarkable. The phrenicoabdominal vein and surrounding vasculature are normal.

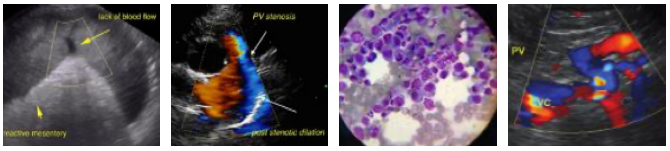
Spleen

The spleen is normal in size (2.12 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 enlarged with slightly swollen peripheral contours. The parenchyma is isoechoic relative to the spleen and diffusely homogeneous in appearance. No distinct focal lesions are observed. Vascular and biliary tracts are of normal volume with no evidence of congestion.
The gallbladder is of normal contours and contains some dependent echogenic debris. The wall is normal in thickness. No choleliths are observed. The cystic and common bile ducts are normal.

Gastrointestinal



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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. No obstructive disease is noted.

Pancreas

The region of the pancreas is isoechoic relative to surrounding omental fat. No obvious parenchymal abnormalities are observed. There is no evidence of regional 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:

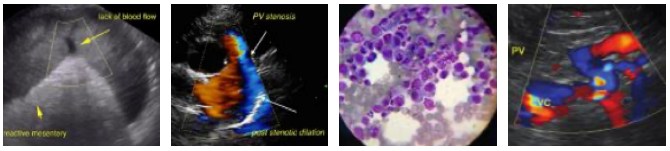
- Suspected benign diffuse hepatopathy. Idiopathic vacuolar hepatopathy is the top differential.
- Gallbladder debris- incidental.
- Mild bilateral chronic renal changes. This finding, in combination with the elevated UPC, suggest a protein-losing nephropathy (PLN). Most cases are idiopathic but PLN can occasionally be secondary to infectious, inflammatory or neoplastic disease.

Secondary Findings:

- The right adrenal nodule trends toward the benign (i.e., nodular hyperplasia) with a lower possibility of an emerging tumor.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Serial monitoring (i.e., every 3-4 months) of the patient's liver values is recommended. If liver values continue to increase, a repeat abdominal ultrasound +/- hepatic tissue sampling may be warranted.
- Given the elevated UPC, consider the following:
  1. Thoracic radiographs to assess for occult disease in the chest.
  2. Infectious disease testing (i.e., tick borne)
  3. Angiotensin II receptor blocker (e.g., Telmisartan)
  4. Antithrombotic (e.g., Clopidogrel at 2.5 mg/kg PO q 24 hours)
  5. Omega-3 fatty acids (65 mg/kg of DHA and EPA combined daily)
  6. Prescription renal diet



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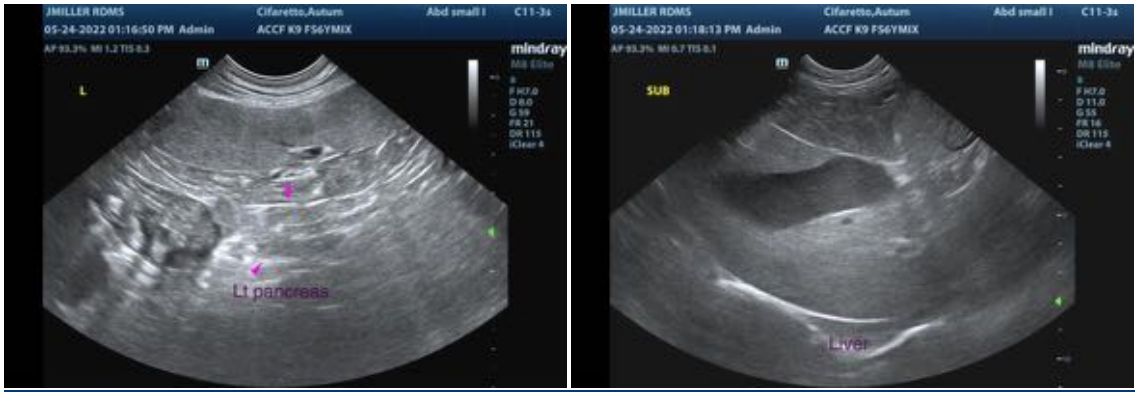
7. Baseline blood pressure measurement with serial monitoring thereafter
8. Routine monitoring of UPC and bloodwork (CBC, chemistry panel) to assess for progressive disease

- Given the mildly elevated calcium level, consider an ionized calcium +/- PTH/PTHrP.



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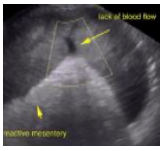
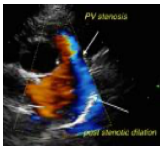
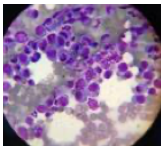
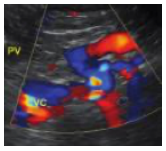

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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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

Andrea.nicastro@sonopath.com