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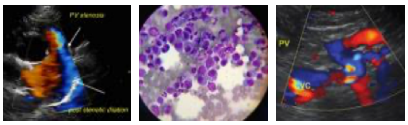

SonoPath
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DATE

2/28/22

PATIENT

Gucci Locicero

SPECIES

Canine

BREED

Shih Tzu

SEX

Female, spayed

AGE

1/23/2013

WEIGHT

16.8 lbs.

INTERPRETED BY

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

HOSPITAL NAME

DocSide Veterinary Medical Center

REFERRING VET

Dr. Tierney

INVOICE

13060

PRESENTING CLINICAL SIGNS

BUN/Crea WNL and stable. USG approximately same. UPS has significantly increased. Dog was negative for HW disease/Lyme/Anaplasma and E.canis on 4dx test 8/24/21. BP slightly elevated but dog is very nervous at vets and has been stable since 4/2021. Doctor feels ticke borne disease, lepto and neoplasia not as likely as renal disease as dog has shown no clinical signs of disease since proteinuria first noted in 4/2021. Recommend start dog on FA supplement- Recc Welactin. Recc gradual build up to full dose and monitor closely for any signs of decreased appetite/borborygmus/vomiting/soft stool d/t history of GI upset. Do not recc change to Low Prot diet d/t history of GI upset that responded to HP diet. If UPC >3.0 recc start on Benazapril or Telmasartin +/- nutritional consult re best low prot diet w/ hx of GI upset. Chronic GI disease responded to Hp diet. IRIS stage 1 renal insufficiency. Now has proteinuria. Has increased from a UPC of 0.1 to 0.5 in 4 months. AUS recommended to screen for underlying cause of proteinuria and to assess kidneys.

Current Medications:
Lab Results: UA: USG 1.024 was 1.022 8/24/21. pH 8.0,Prot 3+, Fat 4-10, All other UA WNL. UPUC: Prot 205.5, Crea 135.9, UPC 1.5 (N<0.5). T4 2.1 WNL. Superchem: Tot Prot: 7.5 (N 5.0-7.4), Alb 4.5 (2.7-4.4), BUN 18 was 31 on 8/24/21. Crea 0.9 was 0.9 8/24/21. All other chem WNL. CBC WNL.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Gabapentin and Trazodone PO.
Stat Report: Not requested.
Imaging Performed By: Stephanie Pearce RDCS, RVT.

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 (4.23 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney is normal size (4.46 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. 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) (0.60 cm at caudal pole) (1.51 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 (0.67 cm at cranial pole) (0.48 cm at caudal pole) (1.87 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 (1.24 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 gall bladder lumen is moderately distended. The wall is normal in thickness. A moderate amount of aggregated echogenic suspended sludge in a partially stellate pattern is observed within the lumen. 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 mildly distended with ingesta. 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 base and limbs of the pancreas are 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:

- Non-specific bilateral nephropathy. Given the patient's clinical history, a protein-losing nephropathy (PLN) is suspected. Most cases of PLN are idiopathic. However, some may be secondary to infectious, inflammatory, or neoplastic disease.
- The gallbladder changes are consistent with a developing mucocele.
- Suspected benign hepatopathy. Top differentials include vacuolar hepatopathy and/or regenerative nodular hyperplasia.

Secondary Findings:

- The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.
- Mild left adrenomegaly. Differentials include normal variation vs hyperplastic change.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

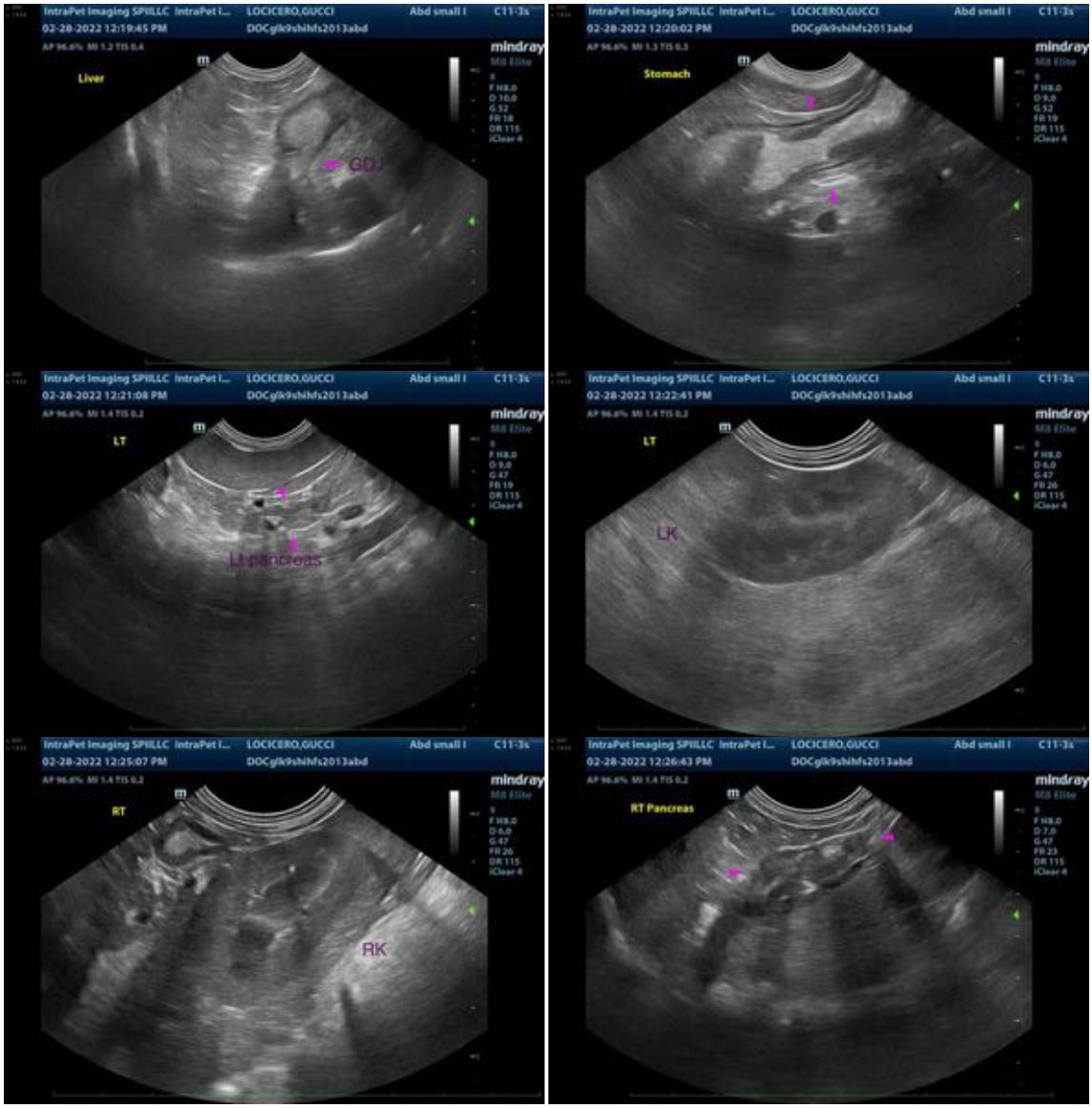
- Regarding the protein-losing nephropathy, consider the following:
    1. Three-view thoracic radiographs can be considered to assess for underlying disease in the chest as a possible cause of the protein-losing nephropathy.
    2. Angiotensin II receptor blocker (e.g., Telmisartan)

3. Antithrombotic (e.g., Clopidogrel at 2.5 mg/kg PO q 24 hours)

4. Serial blood pressure monitoring

5. Routine monitoring of UPC and bloodwork (CBC, chemistry panel) to assess for progressive disease

- Given the gall bladder changes, Ursodeoxycholic acid (Ursodiol) at 10-15 mg/kg once a day is recommended. Serial sonographic monitoring (e.g., every 6-8 weeks) of the gall bladder is recommended to assess for progression to a fully-formed mucocele.



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.

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