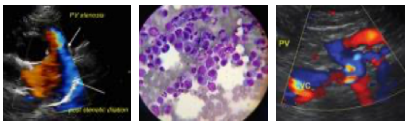
IMAGING PERFORMED BY

IntraPet.com



SonoPath
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DATE

10/6/21

PATIENT

Penny Juengst

SPECIES

Canine

BREED

Yorkie

SEX

Female, spayed

AGE

2016

WEIGHT

6.7 lbs.

INTERPRETED BY

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

HOSPITAL NAME

Frederick Road VH

REFERRING VET

Dr. Beyer

INVOICE

12302

PRESENTING CLINICAL SIGNS

History: Proteinuria. Rescued from hoarding/breeding situation.
MLP 4/4; tiny firm mass left 3rd mammary gland. Bloodwork run for Carpaquin administration after presentation for corneal ulceration.
noted
SDMA 23 ug/dL 0 - 14 HIGH, CREA 1.5 mg/dL 0.5 - 1.5, BUN/UREA 40 mg/dL 9 – 31, TP 5.8 g/dL 5.5 - 7.5, ALB 2.4 g/dL 2.7 - 3.9 LOW, GLOB 3.4 g/dL 2.4 - 4.0, RBC 4.87 M/uL 5.39 - 8.70, HGB 11.3 g/dL 13.4 - 20.7, HCT 34.5 % 38.3 - 56.5.
-fecal: positive for giardia (treated with metronidazole and Fenbendazole)
-spec cpl wnl
-resting cortisol 2.1
-BP 120 mmHg
-in-house urine culture: negative
-recheck PCV/TS: 40%/7.2 g/dL
-UA: USG 1.015; pH 7.0
UPC 2.4
-Repeat UA 3 weeks later: USG 1.014, pH 7.0
UPC 2.5
Current Medications: no current meds but will be starting Telmisartan soon (need to have compounded)
Lab Results & Radiographs: Pending
Date of Previous IntraPet Ultrasound: No previous
Sedation: Not needed.
Stat Report: Not requested.

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 borderline small (3.01 cm in length) with an irregular shape. The cortex is variably thickened and there is poor corticomedullary distinction. Hyperechoic shadowing diverticular foci are visualized. Moderate pyelectasia is present (0.42 cm in the transverse plane). There is no evidence of hydroureter. Renal vasculature is normal.

The right kidney is normal size (3.91 cm in length) with a slightly irregular shape. The cortex is variably thickened and there is poor corticomedullary distinction. The cortical parenchyma is slightly heterogeneous with an ill-defined cystic area at the caudolateral aspect. Linear foci of mineralization are also observed within the cortex. Several small other cortical cysts are present. Hyperechoic shadowing diverticular foci are seen. Moderate pyelectasia is present (0.47 cm in the longitudinal plane). There is no evidence of hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal size (0.46 cm at cranial pole) (0.40 cm at caudal pole) (1.78 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 (0.47 cm at cranial pole) (0.40 cm at caudal pole) (0.98 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 (1.01 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 normal in size with normal curvilinear peripheral contours. The parenchyma is hypoechoic relative to surrounding omental fat. No focal lesions are observed. A few foci of mineralization are observed along the walls of the intrahepatic biliary tracts. Vascular is of normal volume with no evidence of congestion. The portal vein: 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. 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
There is no evidence of free fluid. A few visible (<0.5 cm) mesenteric lymph nodes are seen.

ULTRASONOGRAPHIC FINDINGS

Primary Findings:

- Bilateral nephropathy with pyelectasia and dystrophic mineralization. Given the clinical history, a protein-losing nephropathy is likely. Possible causes include idiopathic or secondary to infectious disease or occult neoplasia. Idiopathic protein-losing nephropathies are the most common scenario.

Secondary Findings:

- Intrahepatic bile duct mineralization- incidental.

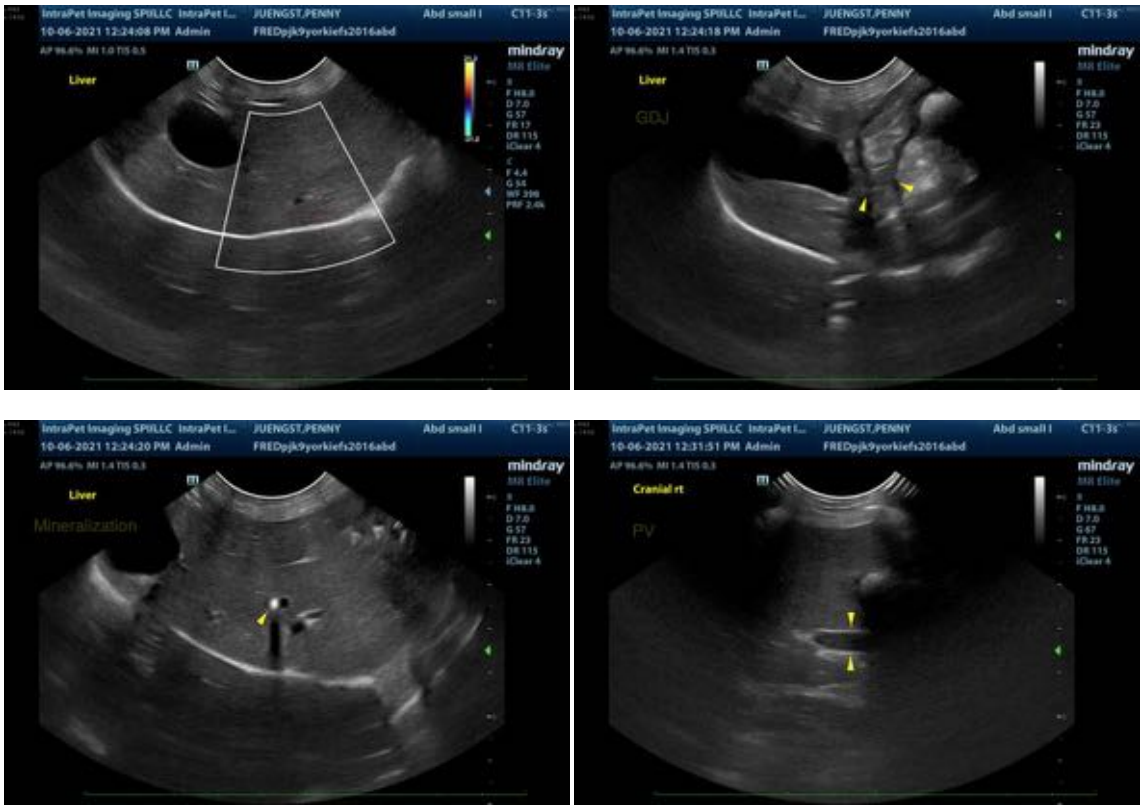
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Treatment recommendations for PLN include:

1. Angiotensin II receptor blocker (e.g., Telmisartan)
2. Antithrombotic (e.g., Clopidogrel at 2.5 mg/kg PO q 24 hours)
3. Omega-3 fatty acids (65 mg/kg of DHA and EPA combined daily)
4. Prescription renal diet
5. Serial monitoring of UPC, blood pressure and bloodwork (CBC, chemistry panel) to assess for progressive disease

- Consider three-view thoracic radiographs to assess cardiopulmonary status, particularly if fluid therapy is to be initiated in the future.

- A comprehensive tick panel can be considered if the clinical suspicion for tick-borne infection is high.



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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