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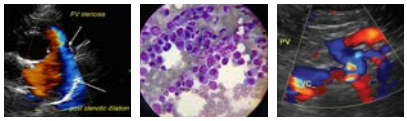
IntraPet.com



SonoPath

Clinical Sonography & Telecytology

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**DATE**

1/24/23

**PATIENT**

Dmitri Rickelton

**SPECIES**

Feline

**BREED**

DSH

**SEX**

Neutered Male

**AGE**

1/5/11

**WEIGHT**

4.2 kg

**INTERPRETED BY**

Kathleen Sennello DVM, MS, Diplomate ACVIM (Small Animal Internal Medicine)

**HOSPITAL NAME**

Nexus Vet Specialists

**REFERRING VET**

Dr. Steele

**INVOICE**

44426

## PRESENTING CLINICAL SIGNS

4 pound weight loss, poor appetite, new onset marked azotemia creat 8.1, firm and enlarged liver on abdominal palpation, cannot definitively isolate L kidney, rads from rDVM show hepatomegaly, cannot ID L kidney definitively. Eating better w/supportive care, concern for neoplasia.

Current Medications: Miratax TD PRN, Apoquel 5.4mg once daily
Lab Results: 1/5--creat 8.1, BUN 145, phos 6.9. 9/15 Normal renal values
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Andi Parkinson, BS, RDMS.

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### *Urinary System*

The urinary bladder is moderately distended with anechoic urine. The majority of the bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi. In the apical region of the urinary bladder, there is focal irregularity with a thickened, almost nodular appearance. Two focal polypoid structures/mass effects visualized measure 0.38 cm x 0.47 cm and 0.38 cm x 0.46 cm.

The left kidney has a normal shape and size (4.05 cm) with pyelectasia at 0.48 cm. Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (4.56 cm) with pyelectasia at 0.20 cm.. Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

### *Adrenal Glands*

The region of left adrenal (Cranial to left renal artery) is unremarkable but the adrenal is not distinctly visualized. No evidence of a mass effect is visualized.

The region of the right adrenal (between right cranial kidney and vena cava) is unremarkable, but the adrenal is not distinctly visualized. No evidence of a mass effect is visualized.

### *Spleen*

The spleen is large (1.33 cm in width at the level of the hilus) and hypoechoic, echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. There is a small hyper- to mixed echogenic nodule visualized measuring 0.47 cm x 0.42 cm.

### *Liver*

The liver is large in size, and hypoechoic with smooth peripheral margins. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed.

The gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are mild and primarily anechoic. The cystic and common bile ducts are normal/not visible.

### *Gastrointestinal*

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.36cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layers is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

The visualized areas of duodenum, jejunum and ileum have a uniform diameter with minimal fluid distension. Wall appears subjectively, mildly increased. Jejunum wall measures 0.31 cm. Bowel loops follow a typical curvilinear path with distinct wall layering. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Sections of colon are visualized with formed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

### *Pancreas*

The pancreas is prominent, mottled, and hypoechoic as compared to the surrounding isoechoic mesentery. There are numerous variably sized, hypoechoic nodules and some cysts visualized within the pancreatic parenchyma. There is no evidence of regional mesenteric inflammation or fluid.

### *Free Abdomen*

Evaluation of the peritoneal cavity did not reveal any evidence of effusion, or subjective lymphadenomegaly. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of normal uniform echogenicity.

## ULTRASONOGRAPHIC FINDINGS

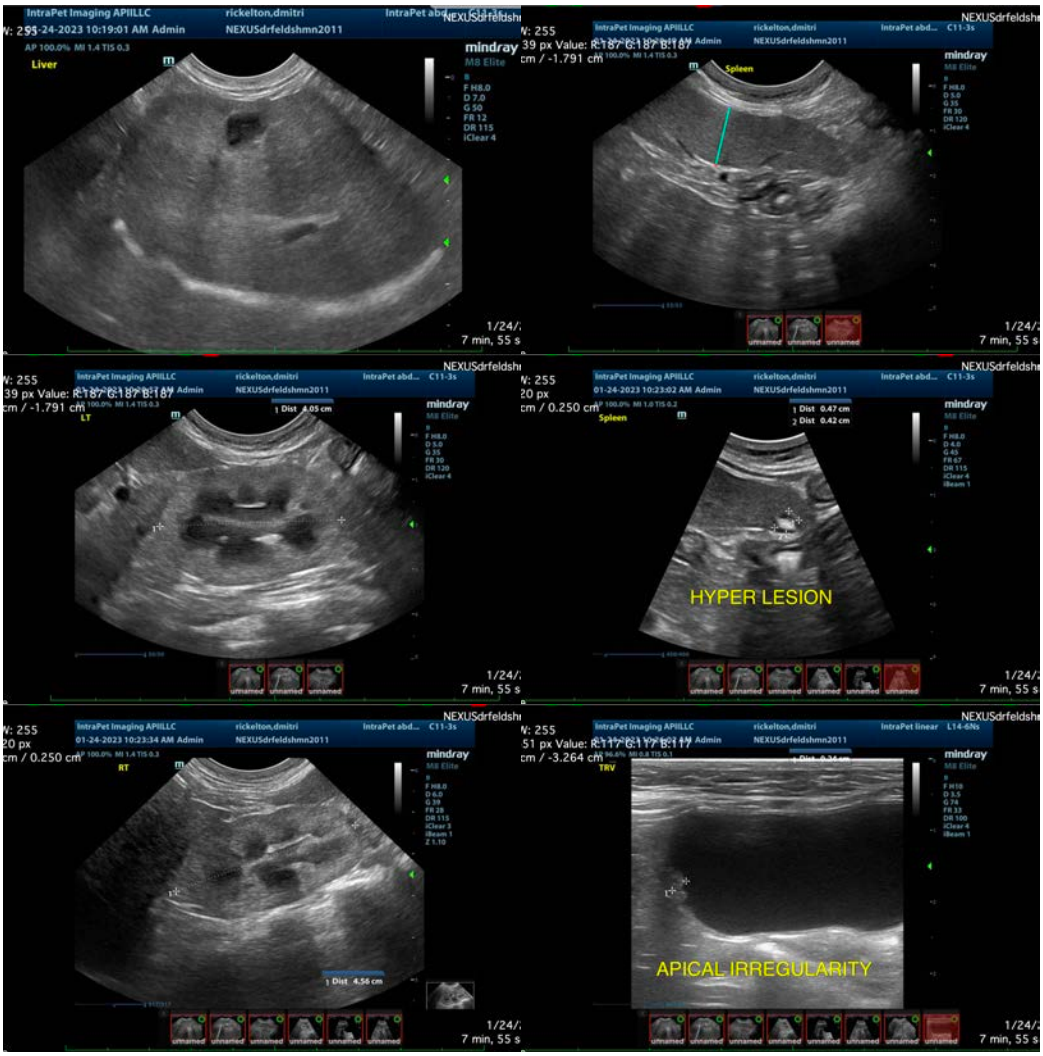
- Focal irregular region at the apex of the urinary bladder – Findings could be consistent with a mass effect (benign or neoplastic), focal cystitis, inflammatory polyps, etc.
- Bilateral renal pyelectasia – Pyelectasia of the kidney(s)could be consistent with pyelonephritis, chronic renal disease, secondary to PU/PD or fluid therapy (if applicable), other.
- Large, hypoechoic, mottled spleen with a hyperechoic nodule – The diffuse splenic changes are non-specific and could be consistent with lymphoid hyperplasia, extramedullary hematopoiesis, infiltrative neoplasia, inflammation, other. Cytology or histopathology would be necessary to get a definitive diagnosis. The nature of the hyperechoic nodule is unclear, but it trends towards a more benign lesion.
- Hypoechoic, mottled/nodular pancreas – The pancreatic changes are most consistent with mild pancreatitis or a recent episode of pancreatic inflammation. The hypoechoic nodules visualized could be consistent with nodular hyperplasia or even a neoplastic change.
- Large, heterogeneous, hypoechoic liver – The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy.
- Mildly prominent muscularis layer to the small intestine – The small intestinal wall changes could be consistent with an underlying inflammatory process. These types of changes can sometimes be seen

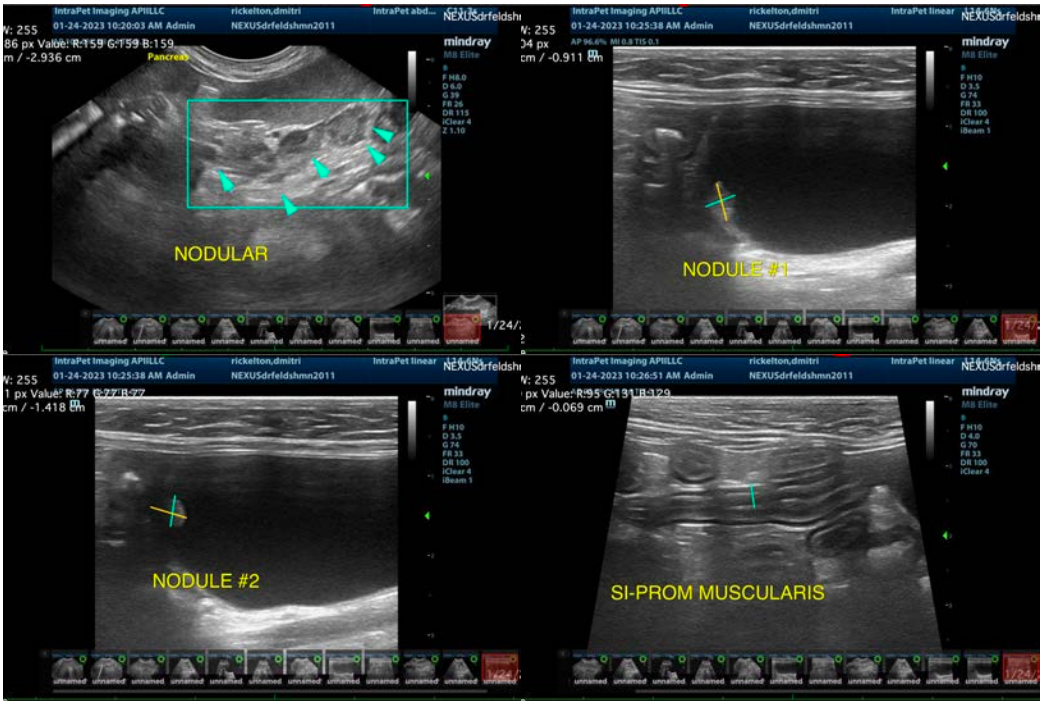
in normal older cats. Correlate with clinical signs.

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Ultrasonographic lesions visualized on today's exam include focal apical irregularity/mass effect of the urinary bladder, bilateral renal pyelectasia, large hypoechoic irregular spleen with a focal hyperechoic lesion, a large hypoechoic heterogeneous liver, a prominent nodular pancreas, and a subjectively mildly prominent muscularis layer to the small intestine.

Further diagnostic and therapeutic recommendations regarding this exam to be made by Dr. Cara Steele.






**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.

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