

**DATE PRESENTING CLINICAL SIGNS**

12/17/21

History: 11/19- weight loss, poor appetite. Found hyperthyroid & systolic bp 184. Started Methimazole - did not tolerate well, vomited. Still not eating well. Started Elura & Cerenia-appetite great for a few weeks then deteriorated again. Gr 2 murmur, but no echo requested (is hyperthyroid)

**PATIENT**

Arwen Kraus

Current Medications: Elura 0.25ml (5mg) once daily since 11/23  
Cerenia 0.25 ml once daily since 11/23.

**SPECIES**

Feline

Lab Results: T4 8-we have not been able to treat the thyroid yet d/t poor tolerance of methimazole.  
Date of Previous IntraPet Ultrasound: No previous IntraPet scans.  
Sedation: Not required to complete full diagnostic ultrasound.  
Stat Report: Not requested.

**BREED**

DSH

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****SEX**

Spayed Female

**Urinary System**

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth. The bladder is moderately distended. A scant amount of suspended echogenic debris is observed within the lumen. 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.

**AGE**

8/22/06

The left kidney is normal in size (3.55 cm in length); with a slightly irregular shape. The cortex is variably thickened. There is poor corticomedullary distinction. Non obstructive nephroliths are present. Moderate pyelectasia is present (0.48 cm in the transverse plane). There is a questionable infarct at the lateral aspect. There is no evidence of hydroureter.

**WEIGHT**

5 Lbs.

The right kidney is normal in size (3.49 cm in length) with a slightly irregular shape. The cortex is variably thickened. There is moderate loss of corticomedullary distinction. Hyperechoic shadowing and diverticular foci are visualized. There is mild pyelectasia (0.26 cm in the longitudinal plane). There is no evidence of hydroureter.

**INTERPRETED BY**

Andrea Nicastro, DMV,  
Diplomate DACVIM  
(Small Animal  
Internal Medicine)

**Adrenal Glands**

The left adrenal gland is enlarged (0.56 cm width) with slightly swollen peripheral contours. The parenchyma is homogenous with normal glandular detail. Surrounding vasculature is normal.

**IMAGING PERFORMED BY**

Andi Parkinson RDMS

The right adrenal gland is normal size (1.09 cm length; 0.51 cm width). Normal shape and glandular echogenicity. The phrenicoabdominal vein and surrounding vasculature are normal.

**HOSPITAL NAME**

Timonium AH

**Spleen**

The spleen is overall subjectively normal in size with irregular peripheral margins at the caudal pole. A 0.75 x 0.63 cm hyperechoic nodule is present in this region. This lesion causes capsular expansion. The remaining parenchyma is homogenous. Splenic vasculature appears normal with no evidence of thrombosis.

**REFERRING VET**

Dr. Kauder

**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.

**INVOICE**

10053

The gall bladder lumen is moderately distended. The wall is thin and smooth. A small amount of aggregated echogenic gravity dependent debris 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 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 segmentally gas distended. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural detail. There is disruption in the normal 1:3 muscularis: mucosal ratio in some segments. A line of fibrosis is also observed within the mucosa in some regions. Discreet masses are not identified. The ileocecal colic junction and colonic wall are normal. No obstructive disease is noted.

### ***Pancreas***

The left limb is visible and is normal in size with normal curvilinear peripheral contours. The parenchyma is hypoechoic relative to surrounding omental fat and is homogenous in appearance. The pancreatic duct is visible but not overtly dilated.

### ***Free Abdomen***

There is no evidence of free fluid. One to two prominent mesenteric lymph nodes are visualized, the largest measuring 0.86 cm.

## **ULTRASONOGRAPHIC FINDINGS**

### **Primary Findings**

- Bowel pattern consistent with inflammatory bowel disease with lower potential for emerging lymphoma
- Hepatic changes are non-specific and could be consistent with hepatic lipidosis, inflammatory/infectious disease, infiltrative neoplasia, or other hepatopathy.
- Bilateral unspecific age-related renal changes with pyelectasia with left nonobstructive nephrolithiasis with a suspected cortical infarct

### **Secondary Findings**

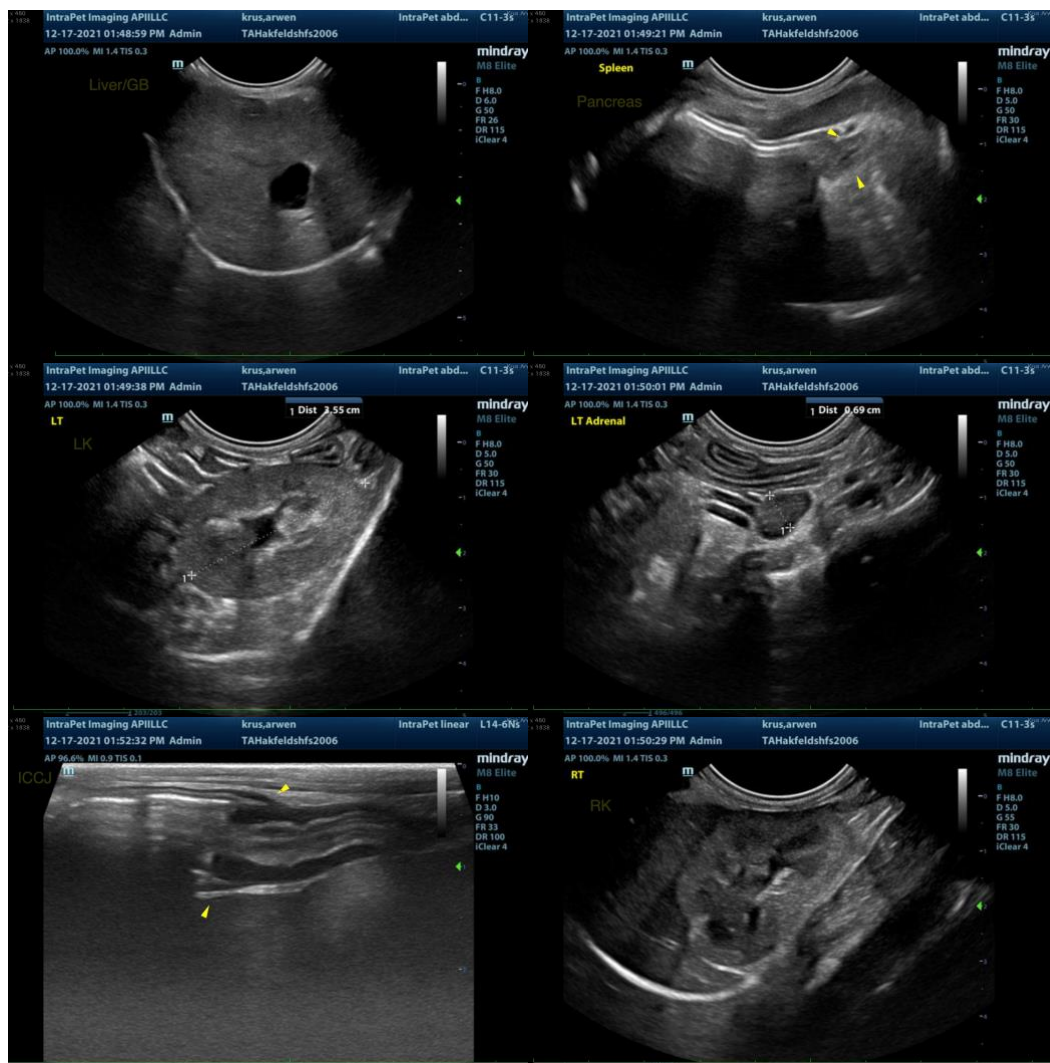
- The hyperechoic splenic nodule trends toward the benign, (i.e., myelolipoma, focus of lymphoid hyperplasia) with lower potential for emerging neoplasia.
- The left adrenomegaly may be secondary to stress, hyperplasia, or an emerging tumor.
- The pancreatic changes may be a normal variant for this patient or could be consistent with mild, chronic pancreatitis. Correlation with clinical findings is recommended.
- The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

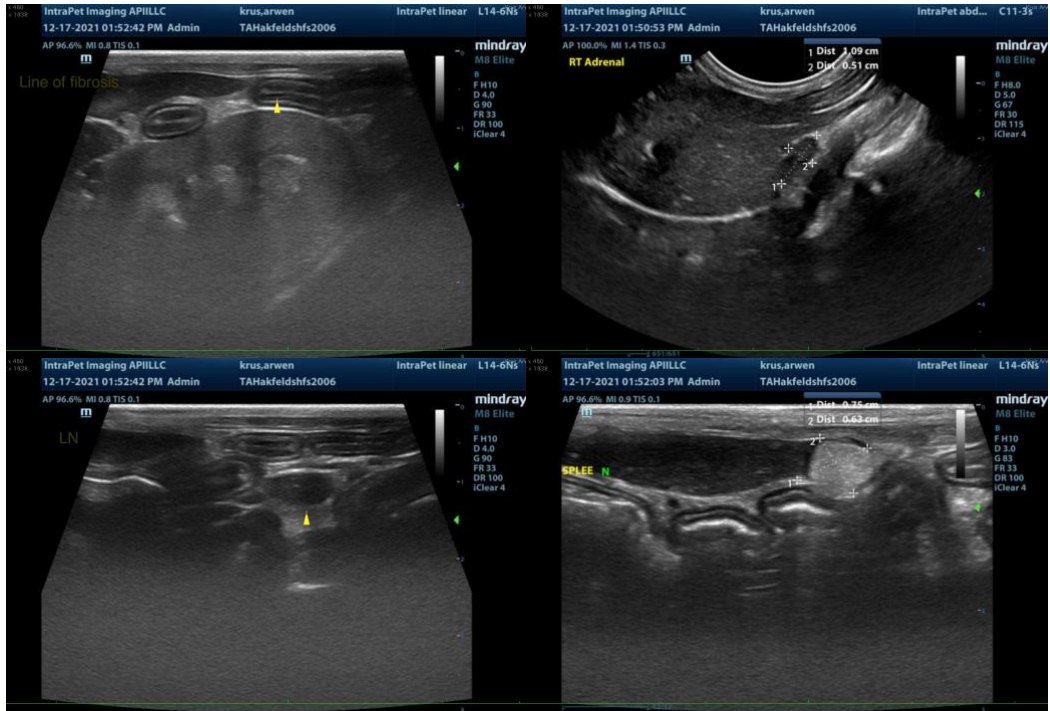
\*Given the patient's history and sonographic changes, there are multiple potential causes for the clinical signs.

## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

1. Consider a urinalysis and culture and sensitivity to assess for occult pyelonephritis.

2. Malabsorption panel including serum cobalamin and folate TLI and PLI
3. Fecal evaluation for ova and Giardia
4. Consider a fine-needle aspirate of the liver, if clotting status is appropriate.
5. Three-view thoracic radiographs are recommended to assess for occult disease in the chest.
6. Depending on the results from the above diagnostics, gastrointestinal +/- liver biopsies may be necessary to get a definitive diagnosis.
7. Regarding the hyperthyroidism, consider other medical options (i.e., transdermal methimazole) or a consultation for I-131 therapy.
8. Given the presence of a murmur, an echocardiogram is also recommended.





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.

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