**DATE PRESENTING CLINICAL SIGNS**

1/24/2022

History: Asymptomatic adult cat when seen for wellness in September. Chronic feline asthma, managed with inhalers. Persistent isosthenuria, suspect early kidney disease. Given age, advise ultrasound to assess.

**PATIENT**

Mosby Stanley

Current Medications: Albuterol 90 mcg/puff q 12 h PRN, Fluticasone 110 mcg/puff q 12 h PRN.

Lab Results: 3/23/21: crea 1.6, USG 1.020. 9/14/21 crea 1.7, USG 1.013.

Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Stephanie Pearce RDCS, RVT.

**SPECIES**

Feline

**BREED**

Domestic shorthair

**SEX**

Male, neutered

**AGE**

10/8/2014

**WEIGHT**

10.38 lbs.

**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. A small amount of aggregated 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.

The left kidney is normal size (3.57 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with poor corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney is normal size (3.66 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with poor corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**INTERPRETED BY**

Andrea Nicastrò, DVM,  
Diplomate ACVIM  
(Small Animal Internal  
Medicine)

**Adrenal Glands**

The left adrenal gland is normal in size (0.24 cm width). Normal shape and glandular echogenicity. The phrenicoabdominal vein and surrounding vasculature are normal.

The right adrenal gland is normal in size (0.36 cm width) with a normal shape and smooth peripheral contours. A few ill-defined hyperechoic areas are observed within the parenchyma. The glandular echogenicity and detail is otherwise normal. Surrounding vasculature is normal.

**HOSPITAL NAME**

Everhart VC

**Spleen**

The spleen is normal in size (0.76 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.

**REFERRING VET**

Dr. Notarangelo

**Liver**

The liver is subjectively normal in size with normal contours and structure. There is appropriate echogenicity and echotexture. No overt structural evidence of inflammatory, infiltrative or regenerative pathology is evident. Vascular and biliary tracts are of normal volume with no evidence of congestion. No pathological hepatic lymphadenopathy observed. The gall bladder lumen is moderately distended. The wall is thin and smooth. A moderate amount of aggregated echogenic suspended debris/sludge is observed within the lumen. The cystic and common bile ducts are normal.

**INVOICE**

12900

### ***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. There is disruption in the normal 1:3 muscularis: mucosal ratio in some segments. Discreet masses are not identified. The ileocecal colic junction and colonic wall are 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:**

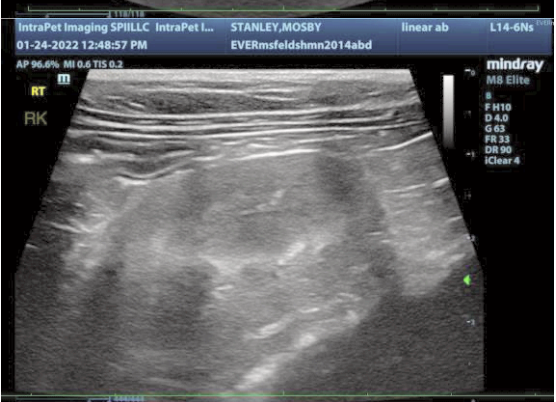
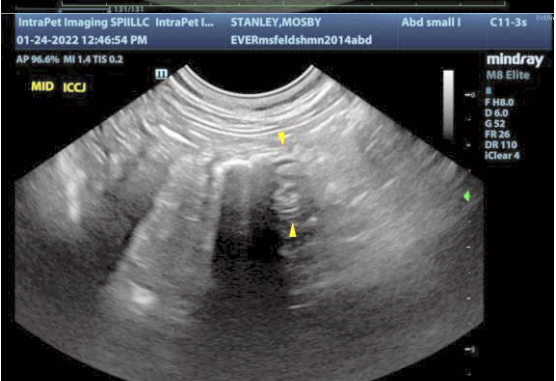
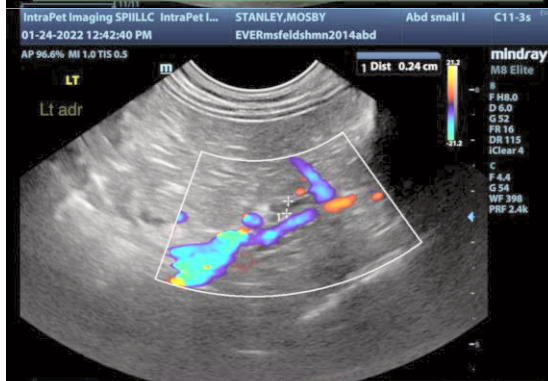
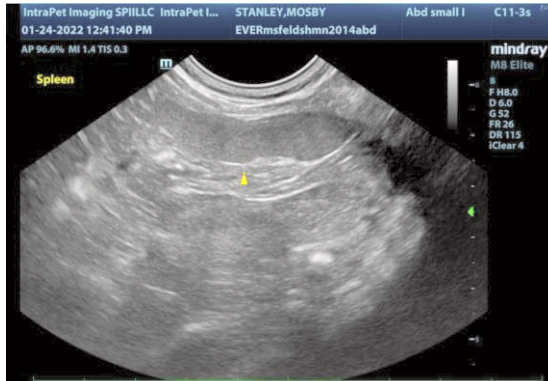
- Moderate to severe degenerative renal changes.

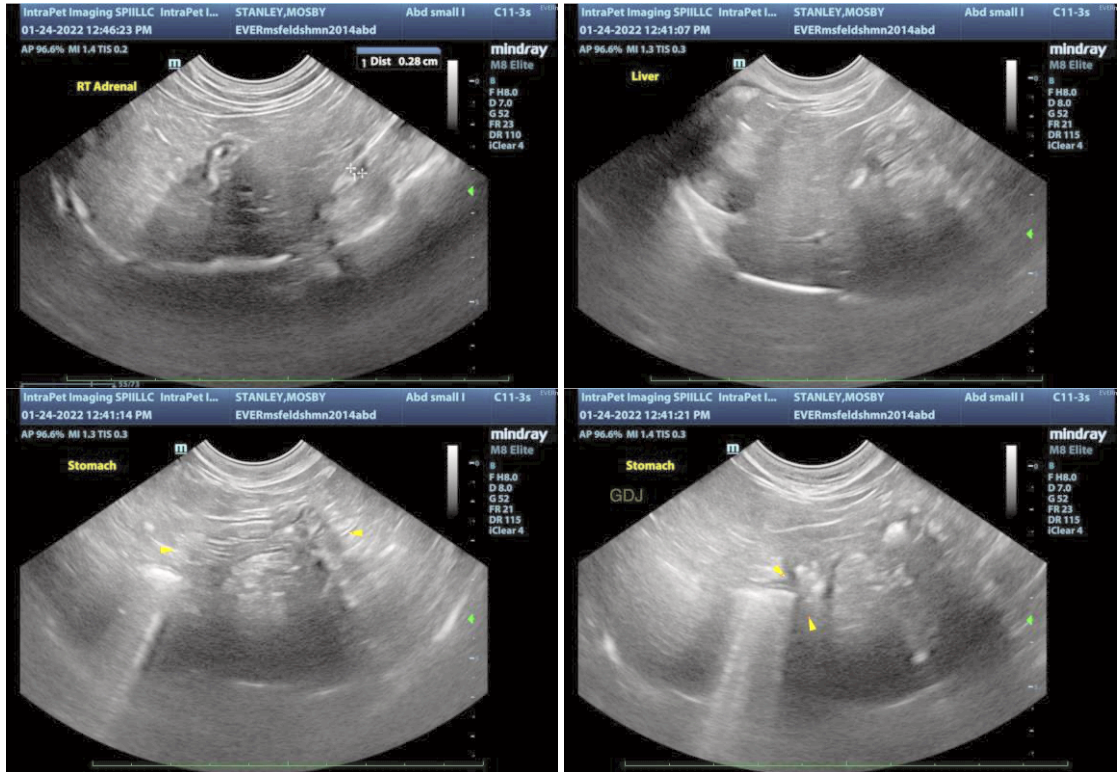
### **Secondary Findings:**

- Urinary bladder debris.
- The hyperechoic areas in the right adrenal gland are likely a benign age-related incidental finding.
- The small intestinal wall changes are most consistent with inflammatory bowel disease. However, correlation with clinical findings is recommended.

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

- Serial monitoring of the patient's renal values is recommended to assess for progressive disease.
- Consider transitioning to a prescription renal diet if the patient will tolerate it.
- When the patient becomes azotemic, consider a baseline blood pressure measurement to assess for systemic hypertension.
- Urine culture and sensitivity and UPC can be considered if clinically appropriate.





**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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