

## PATIENT PRESENTING CLINICAL SIGNS

Jack Elkin History: Anorexia x 5 days, diarrhea. Treated with Cerenia, SQ fluids, metronidazole.  
Abnormal PE/Chem/CBC/UA Results: CBC/Chem: WNL.

## SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Canine **Urinary System**

**BREED** The urinary bladder and visible portion of the pelvic urethra are normal for the degree of luminal distension. The urine is anechoic with no evidence of debris. Cystic calculi and discrete masses are not observed.

Bichon The prostate is normal in size (0.68 cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

### SEX

Neutered Male

The left kidney is normal size (4.22 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with normal corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydronephrosis. Renal vasculature is normal.

### AGE

12 years

The right kidney is normal in size (4.36 cm in length) with a normal shape, smooth peripheral margins, and normal internal architecture. There is minimal loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis. Renal vasculature is normal.

### WEIGHT

15.2 lbs

#### Adrenal Glands

The left adrenal gland is normal size (0.59 cm at cranial pole) (0.57 cm at caudal pole) (0.69 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.

### INTERPRETED BY

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

The right adrenal gland is normal size (0.54 cm at cranial pole) (0.30 cm at caudal pole) (2.07 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.

### IMAGING PERFORMED BY

Kelly Vazquez

#### Spleen

The spleen is normal in size (0.78 cm in width at the level of the hilus) with a normal capsular contour. The parenchyma is subtly mottled in appearance. A few, irregular, hyperechoic nodule are observed throughout the organ. Splenic vasculature is normal.

### HOSPITAL NAME

North Jersey AH

#### Liver

### REFERRING VET

Dr. Shaw

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 portal vein to caudal vena cava ratio is approximately 1: 1.

### INVOICE

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The gall bladder lumen is moderately distended. The wall is thin and smooth. A small to moderate amount of aggregated, echogenic debris/sludge is observed within the lumen, most of which is adhered to the wall. The cystic and common bile ducts are normal/not seen.

### DATE

6/9/22

### ***Gastrointestinal***

The gastric lumen is not distended. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The small intestinal lumen is not dilated. At least one small intestinal segment is hyperperistaltic. The walls are mildly thickened (up to 0.44 cm) with retention of the normal layering pattern. There is evidence of mucosal fogging in some segments. Mucosal fibrosis is also seen in some regions. Discreet masses are not identified. The colonic wall is normal. The colonic lumen is mildly fluid-distended. There is no evidence of an obstructive pattern. Hyperechoic mesentery is adhered to some of the bowel loops.

### ***Pancreas***

The base and right limb 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***

Trace free fluid is observed. Several prominent, mesentery lymph nodes are visualized, the largest measuring 2.06 cm in length. Surrounding mesentery is hyperechoic.

## **ULTRASONOGRAPHIC FINDINGS**

### **Primary Findings**

- Bowel pattern most consistent with inflammatory process (i.e., gastroenteritis, inflammatory bowel disease). Mid-abdominal peritonitis is present, likely secondary to bowel pathology.
- The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

### **Secondary Findings**

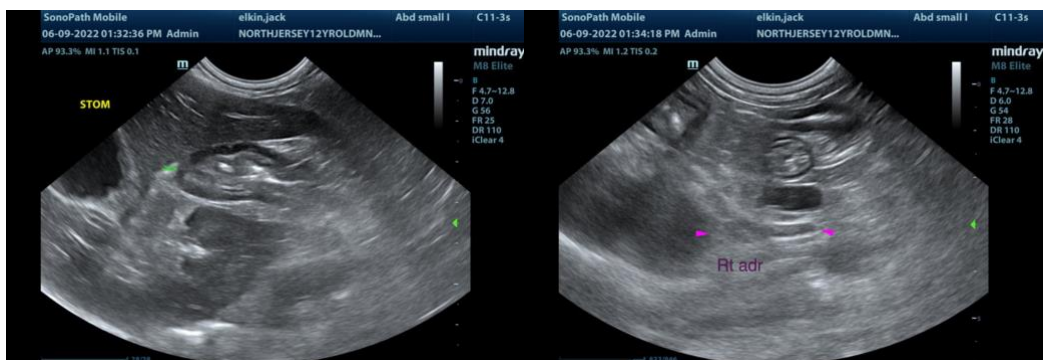
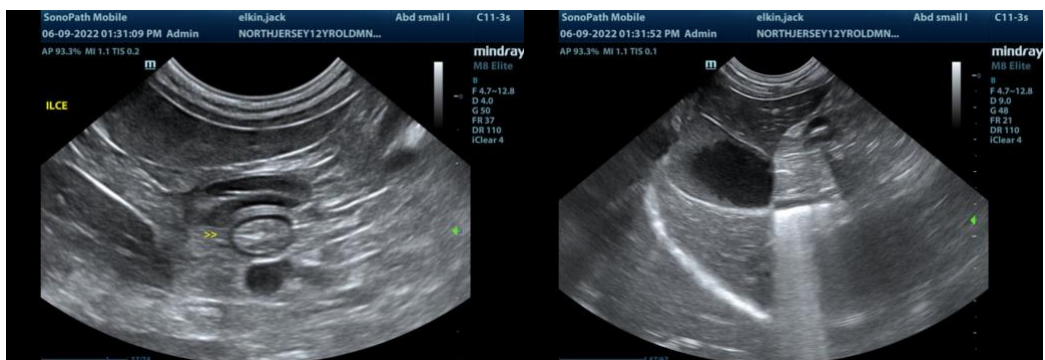
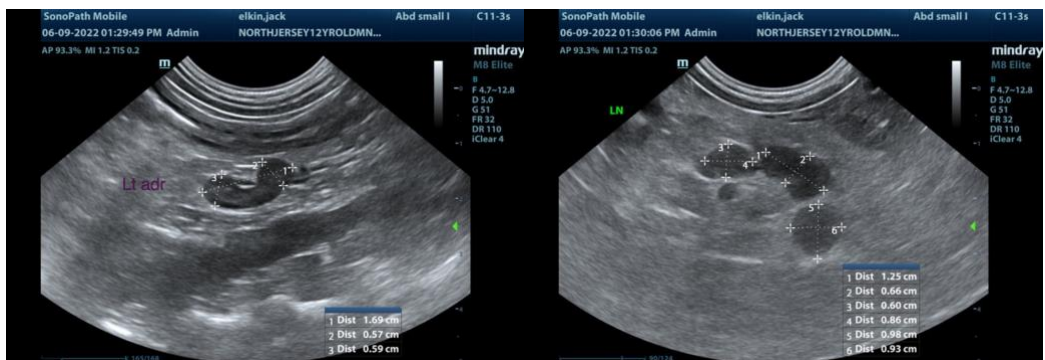
- Age-related pancreatic remodeling
- Minor, age-related right renal changes with dystrophic mineralization
- The hyperechoic splenic nodules trends toward the benign (i.e., myelolipomas) with a low possibility of infiltrative neoplasia. The more diffuse splenic parenchymal changes also trend toward the benign (i.e., lymphoid hyperplasia, extramedullary hematopoiesis, or similar) with a lower possibility of emerging neoplasia.

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

Supportive care for acute gastroenteritis is recommended, along with a fecal evaluation for ova and Giardia and prophylactic deworming with fenbendazole.

A fecal PCR panel for infectious diseases can also be considered.

If the patient's clinical signs do not improve within 48-72 hours of medical management, a more advance GI work-up (i.e., malabsorption panel, GI biopsies) may be warranted.





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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