



**PATIENT**

Nikki Lee

**PRESENTING CLINICAL SIGNS**

History: Sedation Chief Concern triaditis (pancreatitis, cholangiohepatitis, enteritis) : 6 month history of weight loss and eating obsessively. Vocalizing randomly and malodorous feces. No vomiting. PE: BAR, BCS 3/9, tense and fractious on abdominal palpation, equivocally uncomfortable in the cranial abdomen. Moderate dental tartar. Full, clean haircoat. Current medications Clavamox 62.5mg BID Fortiflora SID

**SPECIES**

Feline

**BREED**

DLH

Abnormal PE/Chem/CBC/UA Results: CBC: wnl-Chem: TP 9.0 (H), Glob 6.0 (H), ALT 679 (H), AST 226 (H), ALP 158 (H), GGT 8 (H), Bilirubin total 1.8 (H), Bilirubin unconjugated 0.9 (H), bilirubin conjugated 0.9 (H), cholesterol 306 (H), spec fPL 7.3 (H) UA: 1.039, bil-neg UPC: 0.3 T4: 2.1 FELV/FIV/HW: neg cardiopet proBNP: 76

**SEX**

Neutered Male

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

**AGE**

13 Years

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 2.0 cm exhibited normal thickness and tone. Anechoic urine was present in the lumen with very minor particulate sediment, which may indicate very minor cellular debris/protein, crystalline debris or mucus. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes were noted.

**WEIGHT**

9.6 Pounds

The area of the aortic trifurcation was free of pathology.

**INTERPRETED BY**

R. McKenzie Daniel, DVM,  
DABVP (Canine and  
Feline)

Asymmetrical margination was present in both kidneys. The renal cortex presented uniformly increased in echogenicity with uniform echotexture. The renal cortex appeared to be hypertrophied resulting in an altered cortex: medulla ratio. Mild loss of corticomedullary distinction was also present. The renal medullary volume was subjectively reduced. Pinpoint medullary mineral was present in the left kidney. The left kidney measured 4.4 cm in length. The right kidney was mildly subnormal in size compared to the left kidney, measuring 3.2 cm in length.

**IMAGING PERFORMED BY**

Loetitia Saint-Jacques, RVT  
LVT

**Adrenal Glands**

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.39 cm.

The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.35 cm.

**HOSPITAL NAME**

Mtn. View AH

**REFERRING VET**

Dr. Sarah Kalivoda

**Spleen**

The spleen was borderline enlarged in overall size, measuring 0.95 cm in width at the level of the hilus. The spleen revealed maintained symmetrical capsule contour and finely textured homogeneous parenchyma. No overt evidence of neoplastic criteria.

**Liver**

The liver presented mildly enlarged in size. The parenchyma of the liver was subjectively normal in echogenicity compared to the spleen and renal cortices. The liver parenchyma was uniform with a mildly coarse echotexture. The capsule of the liver was symmetrically rounded to mildly swollen in margination. The hepatic and portal vasculature were normal in appearance without signs of congestion.

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Nikki Lee The gallbladder was non distended in size with primarily anechoic content with minor luminal debris. Subtle dilation of the proximal common bile duct was noted, not consistent with posthepatic obstruction.

**SPECIES** *Gastrointestinal*

Feline The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach was empty with no signs of ileus, obstruction or foreign material. The gastric body wall measured 0.25 cm.

**BREED** The small intestine presented intact wall layering with primarily maintained 1:3 muscularis/mucosa ratio with segmental propensity for mildly prominent muscularis layer yet without overt evidence of mural hypertrophy, loss of intestinal wall layering or intestinal masses. The jejunum wall measured 0.25 cm. The ileocolic wall measured 0.33 cm.

**SEX**

Neutered Male Normal visible colon wall layers were present with apparent formed feces in lumen.

*Pancreas*

**AGE**

13 Years The left limb, right limb, and base of the pancreas presented hypoechoic to heterogeneous echogenicity compared to adjacent omental fat. Mild asymmetrical capsule margination was present with mild variable parenchymal swelling and mild peripancreatic reactivity / inflammation. No overt evidence of neoplasia. Mild pancreatic duct dilatation was present.

**WEIGHT**

9.6 Pounds *Free Abdomen*

Intermittent, mildly prominent mesenteric lymph nodes were present. The lymph nodes were essentially isoechoic to adjacent omentum without evidence of peripheral inflammation and maintaining a normal width: length ratio (<0.5). An example of mesenteric lymph node measured 1.0 cm x 0.42 cm.

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DABVP (Canine and  
Feline)

Focal to intermittent pockets of scant periintestinal free fluid were noted. Mild periintestinal peripancreatic hyperechoic mesentery.

**IMAGING PERFORMED BY**

**ULTRASONOGRAPHIC FINDINGS**

**Primary Findings**

- Cholangitis/cholangiohepatitis hepatobiliary pattern
- Active to chronic active pancreatitis
- Suspect IBD with associated minor benign/reactive intermittent mesenteric lymphadenopathy
- Scant periintestinal free fluid and associated mild reactive mesentery

**Secondary Findings**

- Bilateral chronic renal changes

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The small intestine exhibited subtle mural changes, which may suggest chronic enteropathy, although evidence of significant gastrointestinal mural pathology was not present. Potential for alternative hepatopathy or hepatic neoplastic criteria is considered a less likely differential diagnosis. Further assessment of the liver may include screening hepatic FNA cytology, assuming normal clotting status.

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A GI panel to include PLI/TLI/Cobalamin/Folate is recommended. Triad disease is considered probable in this case. A definitive diagnosis would require full thickness intestinal hepatic and pancreatic biopsies.

**SPECIES**

Feline

Pending additional diagnostics or sampling if elected, triad disease protocol is warranted with assessment of clinical response and monitoring of hepatic enzyme levels and body weight.

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DLH

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Neutered Male

**AGE**

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**WEIGHT**

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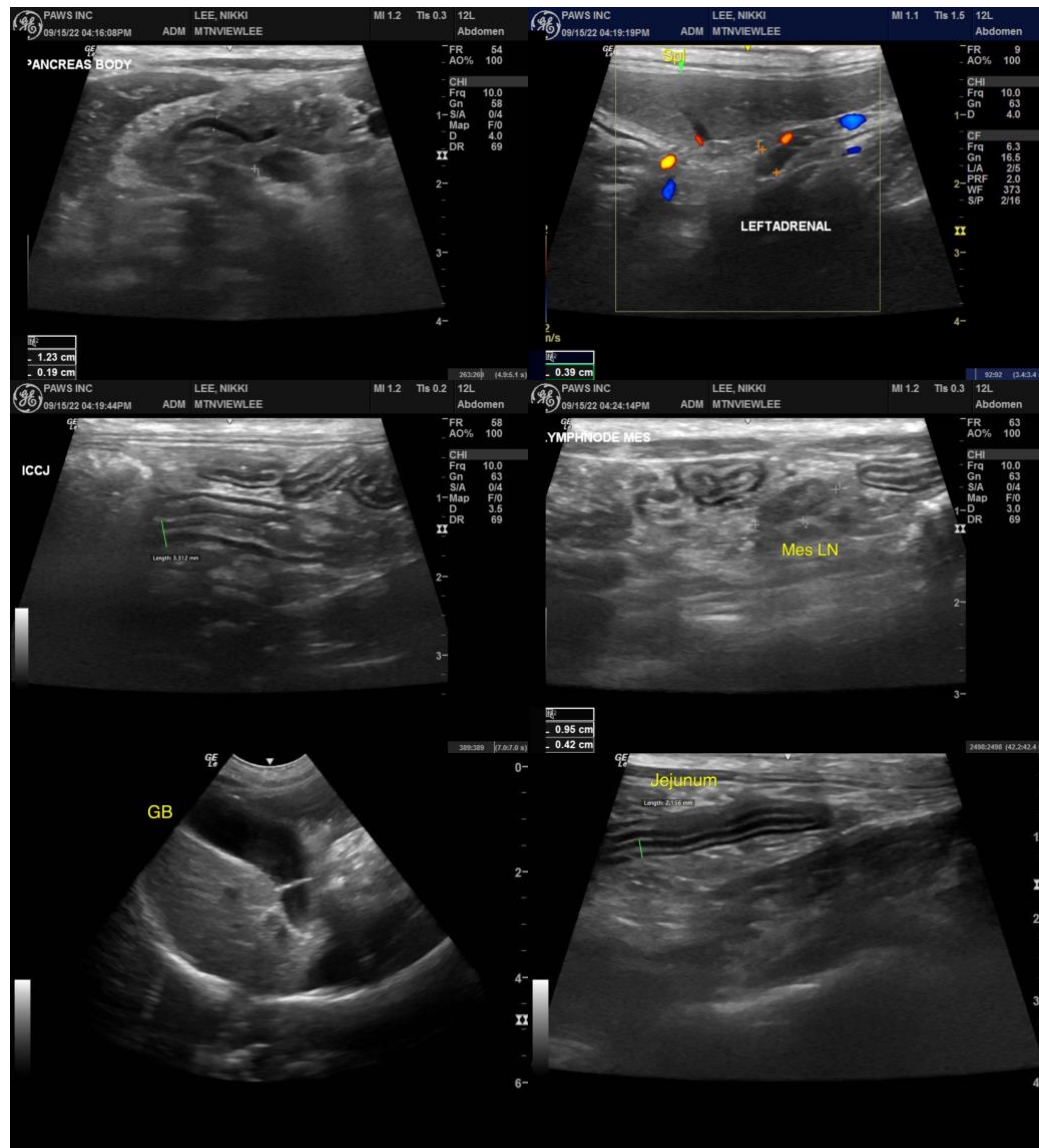
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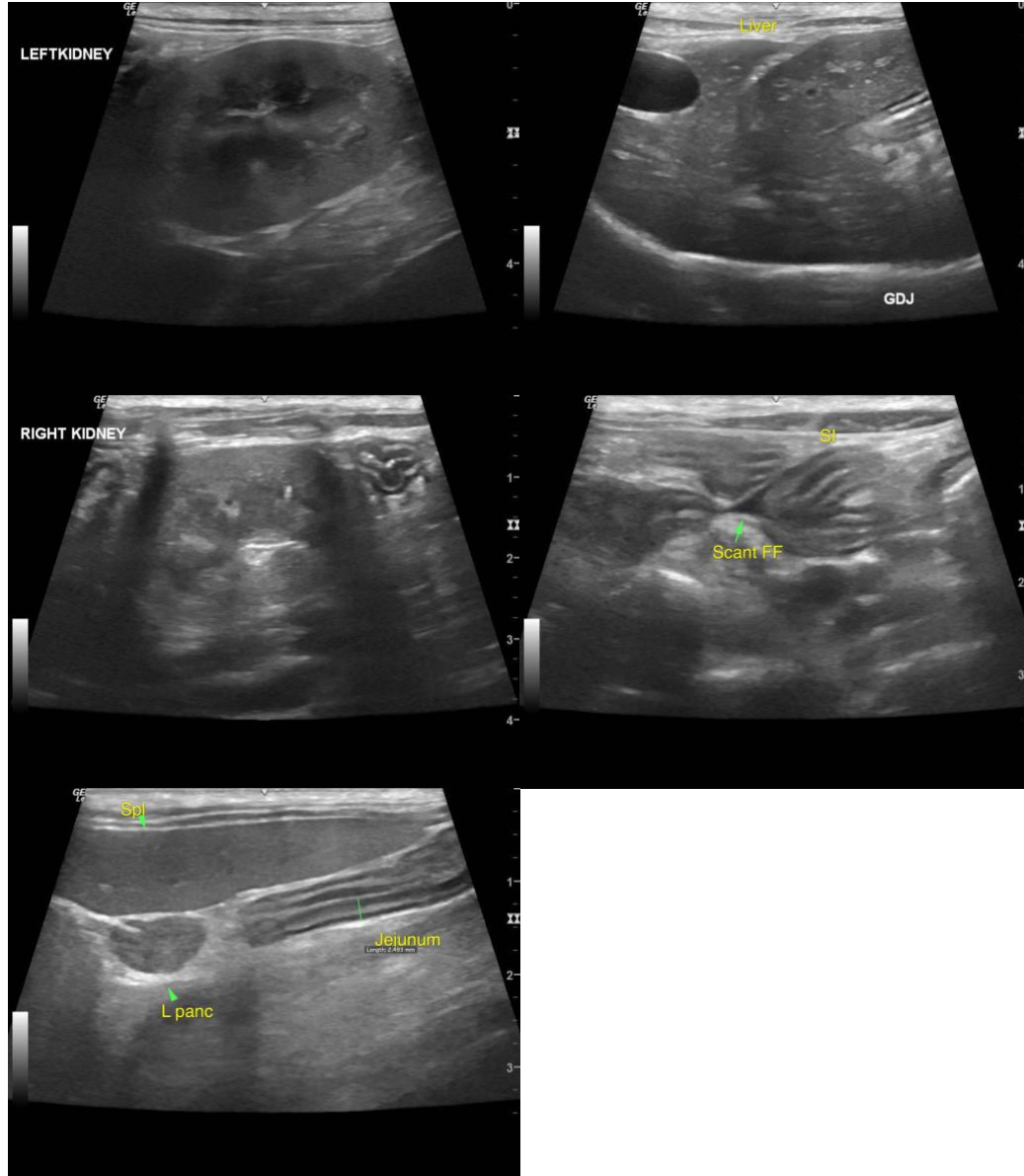
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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