

**DATE PRESENTING CLINICAL SIGNS**

5/10/22

**PATIENT**

Twilight Blount

Referred for continued care; presented to rDVM earlier today for vomiting and loss of appetite. Ran full bloodwork, UA, and sent out Urine Culture today. Azotemic, 32K WBC, Isosthenuric; fPL 10 (Over 5 abnormal) Suspect pyelonephritis. Radiographs showed one very small kidney; other kidney normal size. BUN-57; Creat - 2.6 History of lung lobectomy and mass removal from lung 1 year ago. Recovered very well after that surgery. Had echocardiograph last year; only showed mild changes. Also on Felimazole 2.5mg PO BID.

**SPECIES**

Feline

Current Medications: Buprenorphine, Cerenia, Clavamox, Zeniquin, Methimazole, Gabapentin, Furosemide. Lab Results: See attached.

Date of Previous IntraPet Ultrasound: No previous.

**BREED**

DSH

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

**SEX**

Spayed Female

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****Urinary System**

The urinary bladder is moderately distended with anechoic urine. 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.

**AGE**

6/1/06

The left kidney is small (2.27 cm) and irregular in shape (likely due to previous infarcts). There is a 0.42 cm non-obstructive nephrolith visualized. There is mild pyelectasia at 0.17 cm. Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of hydroureter. Renal vasculature is normal.

**WEIGHT**

11.3 Pounds

The right kidney has a normal shape and size (3.52 cm) with mild pyelectasia at 0.41 cm and pinpoint non-obstructive nephroliths. Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of infarcts or hydroureter. Renal vasculature is normal.

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Rachel Brilhart RDMS

**Adrenal Glands**

The left adrenal gland is normal in size measuring 0.42 cm at the caudal pole. It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

**HOSPITAL NAME**

Animal Emergency  
Hospital

The right adrenal gland is normal in size measuring 0.48 cm at the caudal pole. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

**REFERRING VET**

Dr. Martinoli

**Spleen**

The spleen is subjectively normal in size, echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

**INVOICE**

37576

**Liver**

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is homogenous echotexture. 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 primarily anechoic. The bile duct is somewhat prominent, measuring 0.24 cm.

### ***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 relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. The duodenum measured as normal (between 0.13-0.38cm in wall thickness) and the jejunum measured as normal (between 0.15-0.36cm.) 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 large and hypoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is evidence of regional mesenteric inflammation. Consistent with mild pancreatitis. Prominent pancreatic duct noted measuring 0.27 cm.

### ***Free Abdomen***

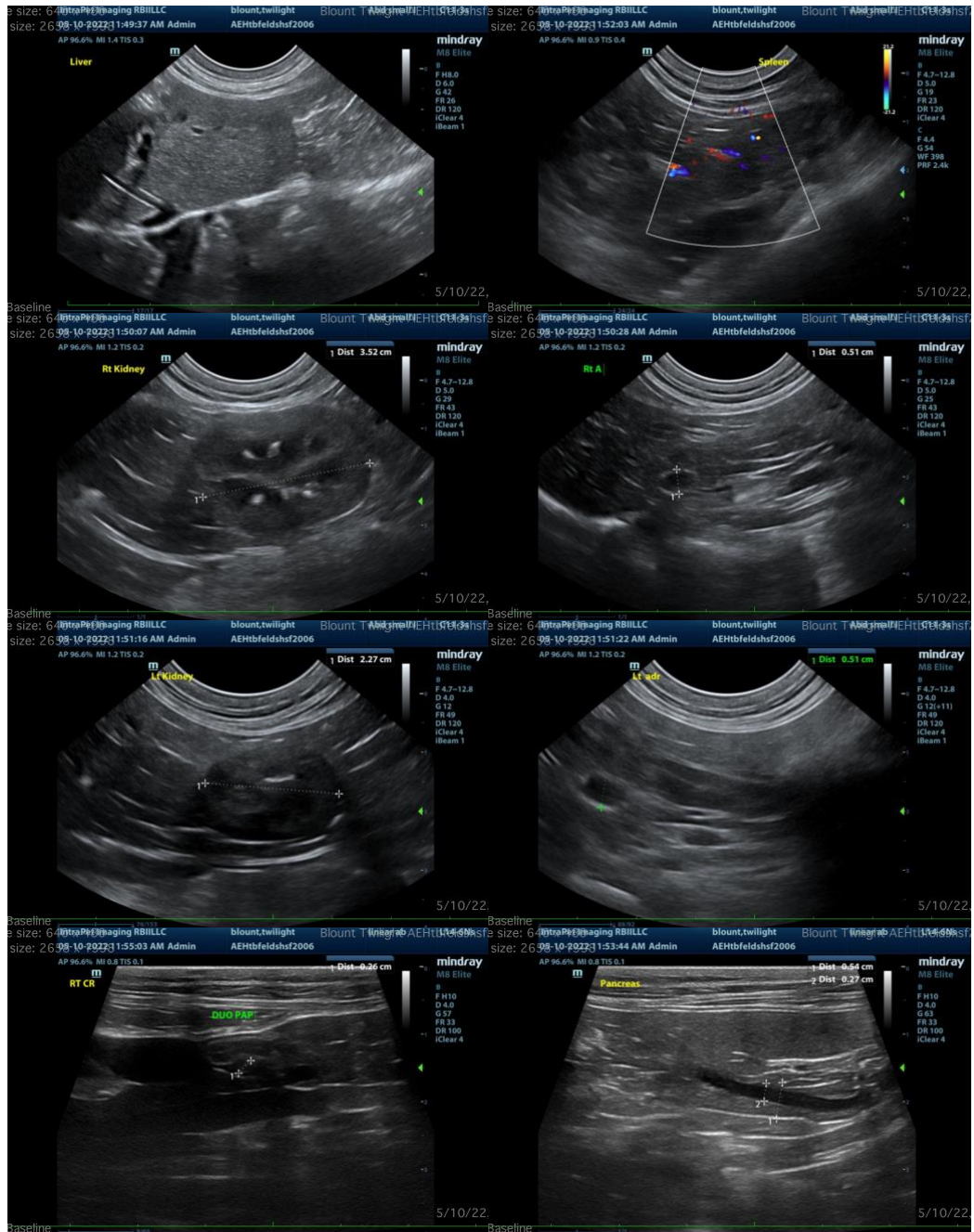
Evaluation of the peritoneal cavity did not reveal any evidence of effusion, or subjective lymphadenomegaly. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of normal uniform echogenicity.

## **ULTRASONOGRAPHIC FINDINGS**

- Decreased corticomedullary distinction in both kidneys with mild pyelectasia and non-obstructive nephroliths. The left kidney is small and irregular in shape, most consistent with previous injury/infarcts. The right kidney is larger, with some mild structural changes - Mild loss of corticomedullary distinction in both kidneys could be consistent with chronic degenerative disease or interstitial nephrosis. Pyelectasia of the left/right kidney could be consistent with pyelonephritis, chronic renal disease, secondary to PU/PD or fluid therapy (if applicable), other.
- Hypoechoic pancreas with prominent pancreatic duct – The pancreatic changes are most consistent with moderate pancreatitis/pancreatic inflammation. Recommend fPLI testing and continued monitoring for improvement or possible development of a pancreatic abscess. Consider fine needle aspirate if not improving.

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

The left kidney is shriveled and irregular, most consistent with previous injury. There is mild pyelectasia in both kidneys, so your plan to treat for pyelonephritis in addition to urinalysis, culture and blood pressure evaluation is a good plan. Additionally, there are changes to the pancreas. It is prominent with a prominent pancreatic duct, and there is mildly hyperechoic mesentery surrounding. Concurrent treatment for pancreatitis is recommended.



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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