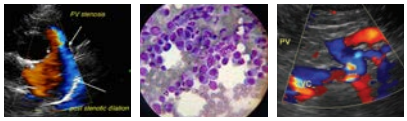
IMAGING PERFORMED BY

IntraPet.com



SonoPath

Clinical Sonography & Telecytology

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DATE

5/5/23

PATIENT

Blizzard Evans

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

5/1/06

WEIGHT

9.98 Pounds

INTERPRETED BY

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

HOSPITAL NAME

Eastern AH

REFERRING VET

Dr. Warner-Jones

INVOICE

47132

PRESENTING CLINICAL SIGNS

Progressive lethargy, weakness and weight loss over 1-2 months. Vomiting bile in the morning. PE Geriatric cat with abnormal abdominal palpation, mass vs fibrin ensnarled intestines. Suspect CKD with abdominal mass comorbidity

Current Medications: Holding in hospital on IV fluids and cerenia.
Lab Results: SDMA 20, Creat 2.8, BUN 64, USG 1.013, Borderline anemia
Radiographs: central zone poor detail, most consistent with mass and clumped intestines.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Requested/Approved.
Imaging Performed By: Stephanie Warga RDCS, RVT.

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.

The left kidney has a normal shape and size (3.4 cm) with severe pyelectasia/hydronephrosis measuring 1.52 cm. Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of nephroliths or infarcts. Renal vasculature is normal. The proximal ureter measures at 0.35 cm but is not visualized distally.

The right kidney has a normal shape and size (3.38 cm) with significant pyelectasia at 0.68 cm. Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.39 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.

The right adrenal gland is normal in size measuring 0.46 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.

Spleen

The spleen is subjectively normal in size (0.99 cm), 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.

Liver

The liver is borderline large, mildly hyperechoic, and slightly irregular. The visible portions of the vasculature and biliary tract appear normal. There is a hyperechoic nodule visualized in the region of the gallbladder measuring 0.70 cm in diameter. The gallbladder is poorly visualized. There is a small irregular area within the hepatic parenchyma most consistent with an empty gallbladder. The bile duct is slightly prominent distally measuring at 0.35 cm.

The gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are mild and primarily anechoic. The cystic and common bile ducts are normal/not visible.

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. Jejunum wall measures 0.26 cm. Visualized peristalsis appears appropriate. Much of the small bowel appears somewhat clumped with irregular omentum in the mid to caudal abdomen. Some of the bowel appears slightly corrugated, consistent with focal enteritis.

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 prominent and mottled compared to the surrounding isoechoic mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

Free Abdomen

There is a moderate amount of free abdominal fluid. Occasional mildly prominent mesenteric lymph nodes noted. One such lymph node visualized measures 0.46 cm. The omentum appears irregular with poorly defined nodules and clumped in the mid abdomen.

Other

There is a somewhat irregular mixed echogenic, hyperechoic body wall mass visualized measuring >1.58 cm x 0.86 cm. A direct communication between this mass lesion and the abnormal omentum is not visualized, but they appear to be in proximity to each other.

PRIMARY FINDINGS

- Decreased corticomedullary distinction in both kidneys with significant/severe pyelectasia – Mild loss of corticomedullary distinction in both kidneys could be consistent with chronic degenerative disease or interstitial nephrosis. Pyelectasia of the kidney(s)could be consistent with pyelonephritis, chronic renal disease, secondary to PU/PD or fluid therapy (if applicable), other.

- Slightly irregular, large, mildly hyperechoic liver with hyperechoic nodule – Hepatic changes are non-specific and could be consistent with hepatic lipidosis, inflammatory/infectious disease, infiltrative neoplasia, or other hepatopathy. The significance of the hyperechoic nodule is unclear, but the appearance trends towards a benign process.

- Mild mesenteric lymphadenopathy – The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

- Clumped, irregular, almost nodular mesentery – Findings are concerning for possible inflammatory/neoplastic process. Differentials would include carcinomatosis, mesothelioma, metastatic sarcoma, sclerosing peritonitis, etc.

- Body wall mass – This could represent a benign or neoplastic lesion. Based on the irregularity of the lesion, a neoplastic process is concerning. Consider sarcoma, mesothelioma, carcinoma, etc.

SECONDARY FINDINGS

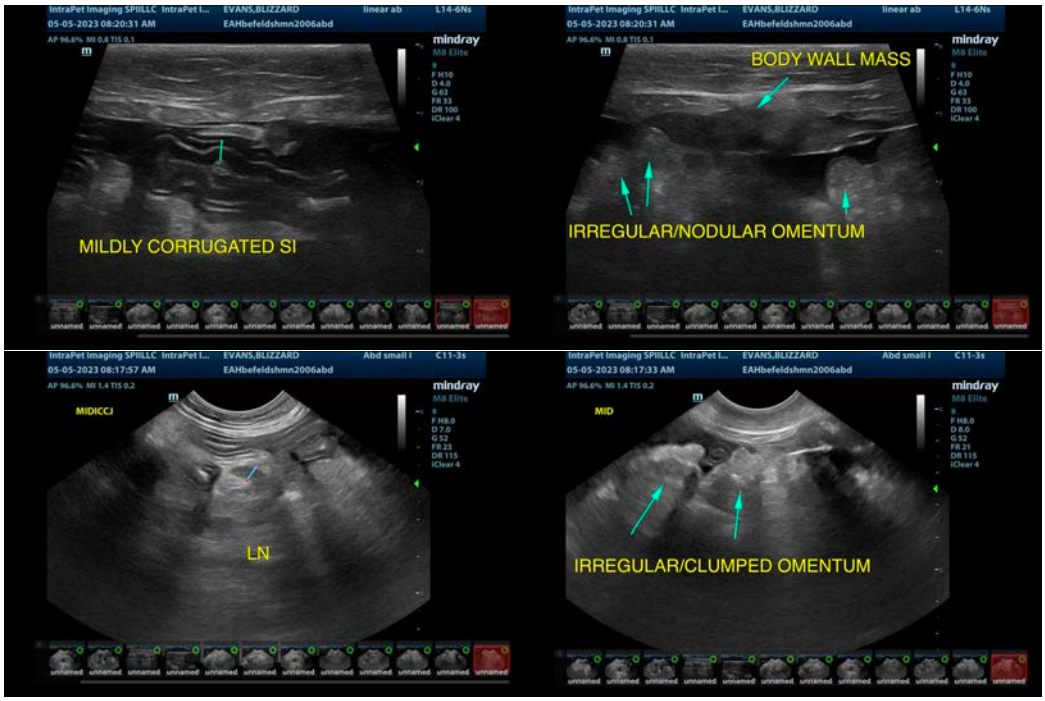
- Prominent, mottled pancreas – The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.

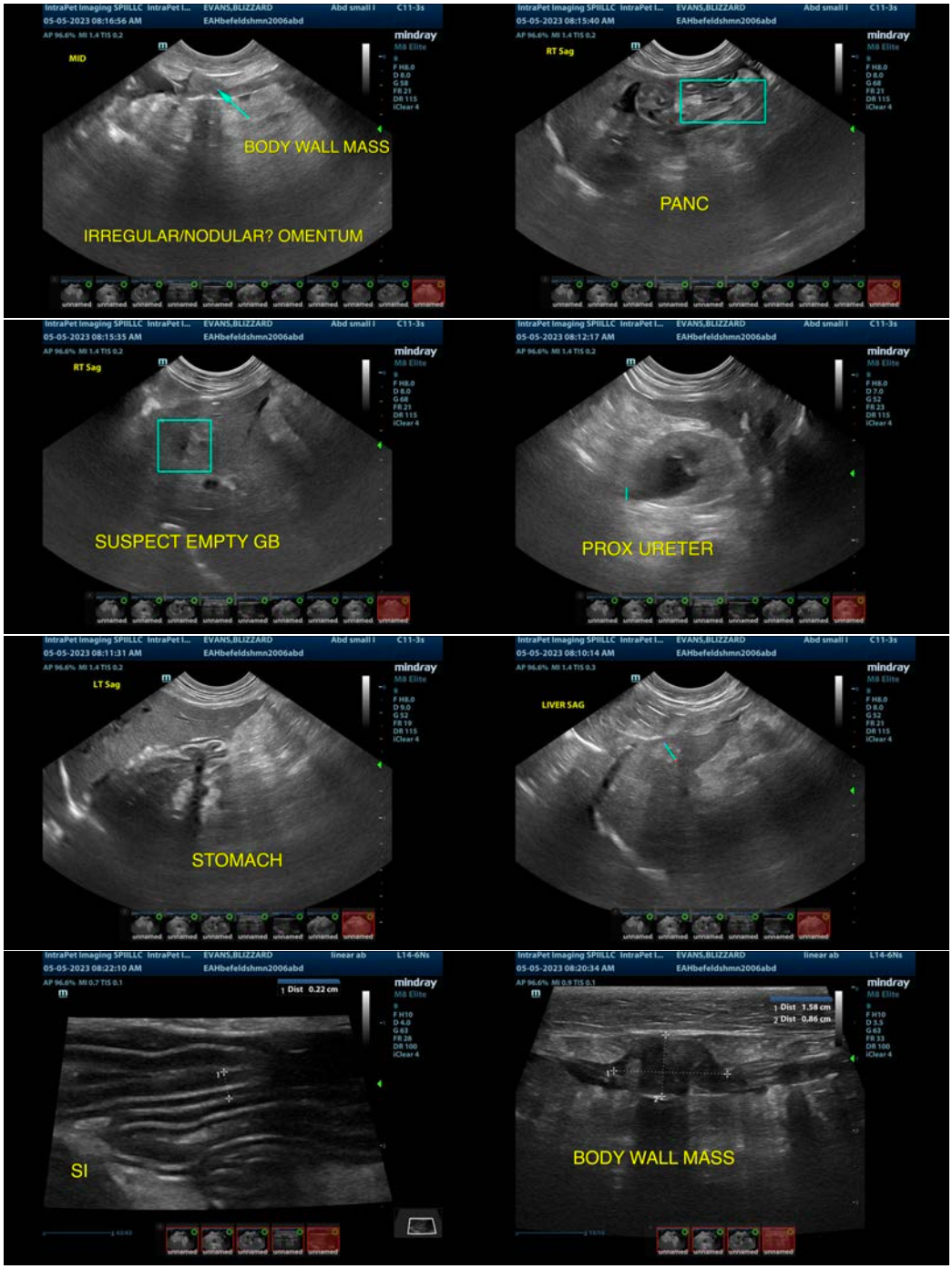
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

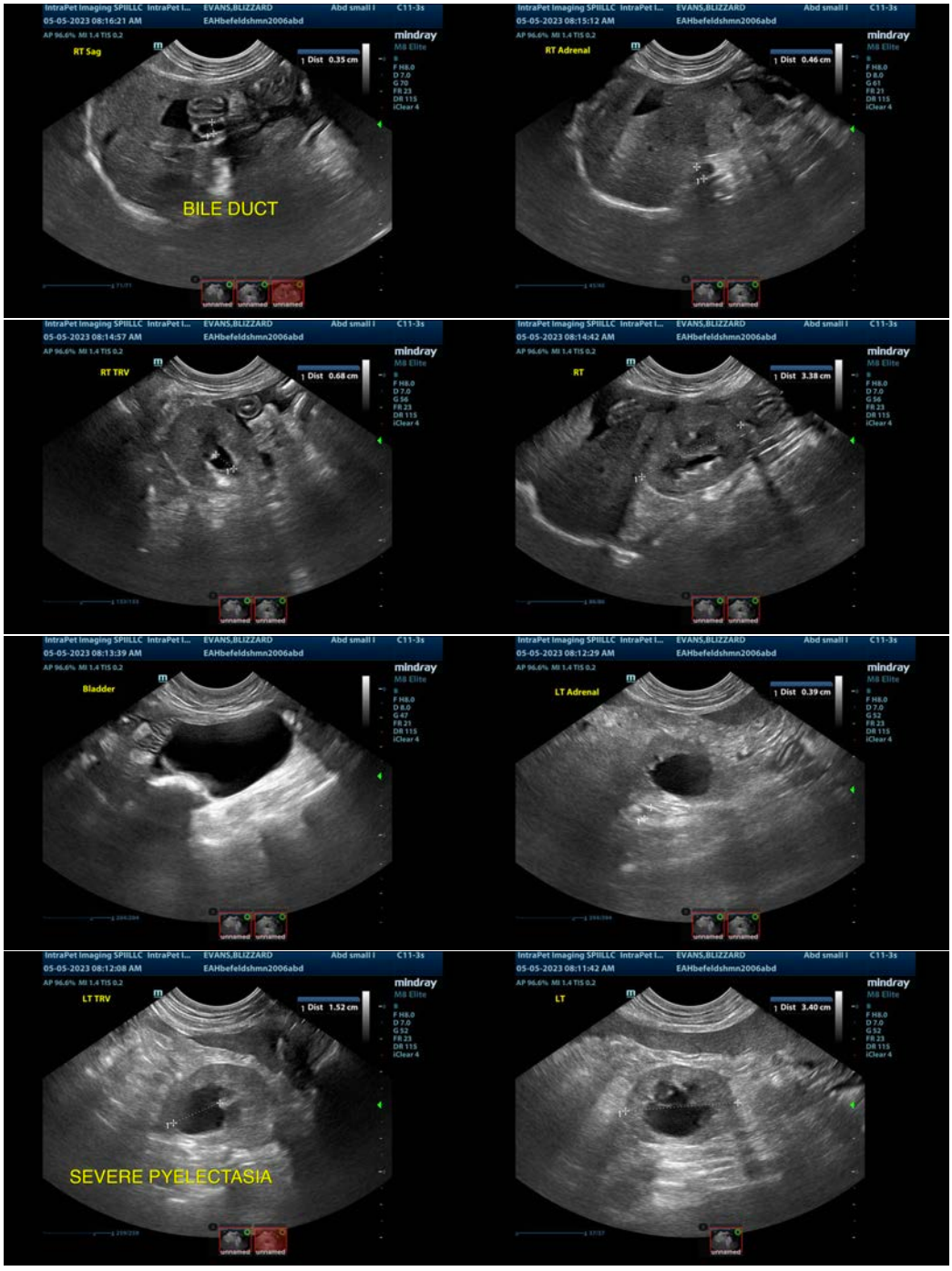
A focal mass effect visualized associated with the body wall. Recommend a fine needle aspirate of this lesion. Additionally, the mesentery/omentum appears somewhat nodular and hyperechoic with the appearance of somewhat entrapped bowel. This could be concerning for an inflammatory or neoplastic process involving the mesentery. Recommend a fluid analysis and cytology to further evaluate. If these evaluations are not diagnostic, an exploratory with biopsies may be necessary.

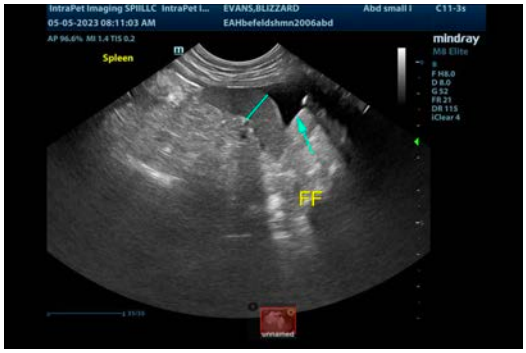
Both kidneys have significant pyelectasia. The left kidney is more severe, bordering on hydronephrosis. No obvious obstruction is visualized, increasing concern for a possible stricture or similar lesion in the proximal ureter. A contrast study (contrast CT/excretory urogram) would likely be necessary to further evaluate. Recommend a urinalysis and culture, as pyelonephritis could also be a differential.

Recommend three view thoracic radiographs to evaluate for possible concurrent thoracic disease/involvement.




BODY WALL MASS
IRREGULAR/NODULAR? OMENTUM
PANC
SUSPECT EMPTY GB
PROX URETER
STOMACH
LIVER SAG
SI
BODY WALL MASS


RT Sag
Dist 0.35 cm
BILE DUCT
RT Adrenal
Dist 0.46 cm
RT TRV
Dist 0.68 cm
RT
Dist 3.38 cm
Bladder
LT Adrenal
Dist 0.39 cm
LT TRV
Dist 1.52 cm
SEVERE PYELECTASIA
LT
Dist 3.40 cm



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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