

**DATE**

9/15/21

PRESENTING CLINICAL SIGNS

History: P presented for annual wellness exam. At that time, P was found to have lost a pound. BW revealed liver abnormalities and an elevated BUN concerning for possible GI bleed. All other renal values were well WNL.

PATIENT

Willy Wonka Brown

Current Medications: No current medications.

Lab Results: Chronically leukopenic, BUN= 44 (16-37), SDMA= 9 (0-14), Crea= 1.6 (0.9-2.3), ALT= 183 (27-158) ALP=69 (16-67), Liver functional values wnl, T4= 2.3.

Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

Sedation: Not needed.

Stat Report: Not requested.

SPECIES

Feline

BREED

Domestic Shorthair

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.

SEX

Neutered male

The left kidney has a normal shape and size (3.78 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 pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

AGE

7/05

The right kidney has a normal shape and size (XXcm). 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. Pinpoint, non-obstructive nephroliths were noted and measured 3.78 cm. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

WEIGHT

7.3 lbs

INTERPRETED BY

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

Adrenal Glands

The left adrenal gland is normal in size measuring 0.41 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 0.4 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.

HOSPITAL NAME

Paradise AH

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.

REFERRING VET

Dr. Halpern

INVOICE

91852

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. There is a small, hypoechoic lesion that measured 4.1 x 0.57 cm seen on the right side of the liver. 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 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 uniform diameter with minimal fluid distension. Wall thickness is normal to slightly increased. Bowel loops follow a typical curvilinear path with distinct wall layering, but some areas display a prominent muscularis layer which does not display the typical 1:3 muscularis:mucosa layer ratio. The jejunum measured 0.22 cm. 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 prominent and hypoechoic as 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

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

PRIMARY FINDINGS:

- Mildly heterogenous liver with a hypoechoic, focal lesion. Hepatic changes are non-specific and could be consistent with inflammation/infection (cholangiohepatitis), infiltrative neoplasia, lipidosis or other hepatopathy.
- Prominent, hypoechoic pancreas with surrounding, mildly hyperechoic mesentery. The pancreatic changes are most consistent with mild pancreatitis/pancreatic infiltration. I recommend fPLI testing and continued monitoring for improvement or possible development of a pancreatic abscess. Consider FNA if not improving.
- Decreased corticomedullary distinction in both kidneys with non-obstructive nephroliths in the right kidney. Mild loss of corticomedullary distinction in both kidneys could be consistent with chronic degenerative disease or interstitial nephrosis.
- Prominent muscularis layer to the small intestine. The small intestinal wall changes are most consistent with an inflammatory process (i.e., inflammatory bowel disease) with a low possibility of emerging lymphoma.

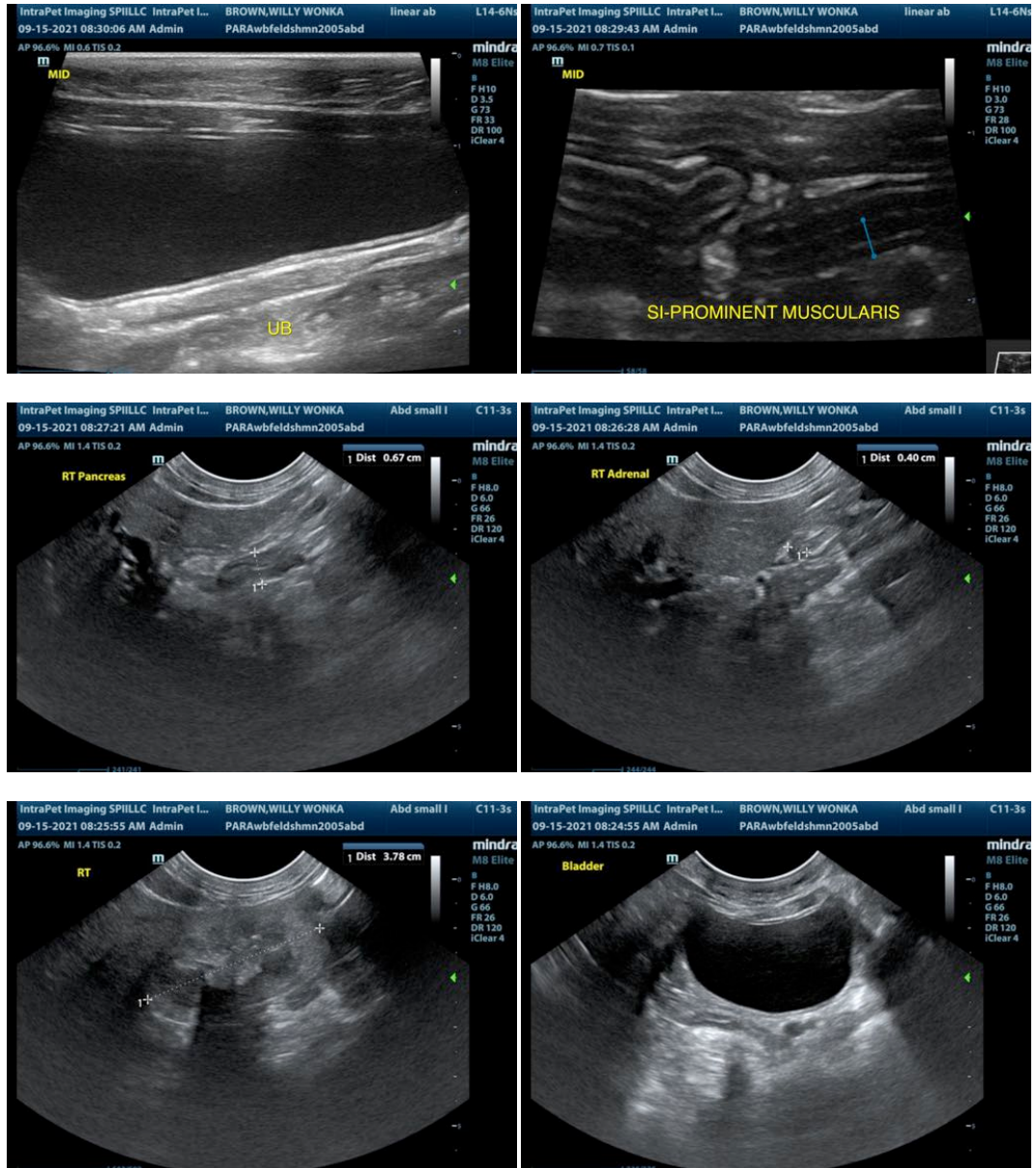
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

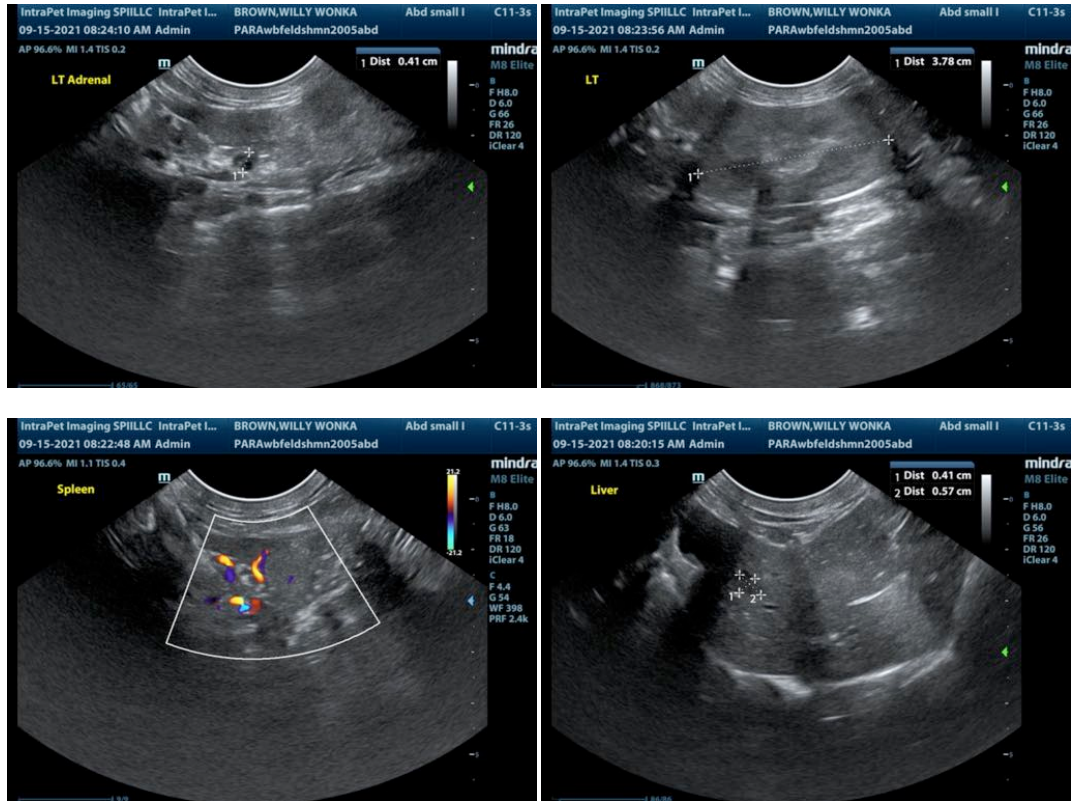
The ultrasonographic lesions observed are relatively mild for an older pet. Correlate blood work findings with urinalysis to further evaluate renal function. I recommend urinalysis, culture and blood pressure measurement as underlying renal disease is suspected.

The liver changes are relatively mild, but there is a hypoechoic lesion present. Consider liver function testing

and a FNA of the liver.

The pancreas is prominent in several imaged and hypoechoic. Consider GI panel with fPLI, B12 and folate to further evaluate for pancreatic and small intestinal disease. I recommend three view thoracic radiographs to evaluate for intrathoracic disease.





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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