

**DATE PRESENTING CLINICAL SIGNS**

10/13/21

History: Timmy has been under the care of CVCA for his heart disease and has been on Spironolactone, Pimobendan, Enalapril and Furosemide only if needed. His BUN and Cr and Alk phos have been slightly elevated for a while. Now Bun, Cr and P are all high as well as Alt and Alk phos. His Hct is 28% and a mild neutrophilia. His belly seemed a little distended and tense so we would like to know if there is anything hiding in it. No recent radiographs.

PATIENT

Timmy Castellano

SPECIES

Canine

Current Medications: Pimobenden 3.75 mg 1/2 BID, Spironolactone 25 mg 1/2 BID, Enalapril 2.5 mg BID, Furosemide PRN.

Lab Results: Attached separately.

Radiographs: Not provided by the veterinarian.

BREED

Chihuahua

Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

Sedation: not needed

Stat Report: not requested

SEX

Neutered Male

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

The urinary bladder is moderately distended with anechoic urine. The Bladder wall is diffusely thickened and somewhat irregular. There is a 0.51 cm shadowing mineralization in the dependent portion of the urinary bladder, most consistent with a small stone. The trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of a mass effect. Findings are most consistent with a diffuse cystitis and a calculus/pile of mineralized debris, but underlying neoplasia cannot be excluded as a possibility.

AGE

4/17/06

WEIGHT

12.68 Pounds

The prostate is normal in size (0.9 cm) and shape for this neutered male dog. The parenchyma is homogenous and the external margins are smooth. The prostatic urethra appears normal with no evidence of irregularity, invasion, mass effect or calculi.

INTERPRETED BY

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The left kidney has a normal shape and size (4.66 cm) with small non-obstructive nephroliths, pyelectasia at 0.35 cm, and numerous small cortical cysts. 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.

HOSPITAL NAME

Green Acres Pet
Center

The right kidney has a normal shape and size (4.43 cm) with small non-obstructive nephroliths and too numerous to count cortical cysts. 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, infarcts or hydroureter. Renal vasculature is normal.

REFERRING VET

Dr. Kaschenbach

Adrenal Glands

The left adrenal gland is normal in size measuring 0.71 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.

INVOICE

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The right adrenal gland is normal in size measuring 0.58 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, 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 subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. There is a large caudal hepatic mass visualized that is largely isoechoic with some hypoechoic cavitations measuring 6.2 cm x 4.52 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 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 <0.7cm 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. Duodenum wall measured 0.41 cm. Jejunum wall measured 0.38 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 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

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.

PRIMARY FINDINGS

- Large, mildly cystic hepatic mass – most consistent with a primary liver tumor. Other differentials are possible.
- Decreased corticomedullary in both kidneys with numerous cortical cysts and pyelectasia – 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.
- Irregular thickened urinary bladder wall with a small focal mineralization – most consistent with a small bladder stone. Recommend urinalysis and culture and correlate findings with radiographs. Recommend monitoring of the bladder wall to see if the irregularity progresses into a mass effect.

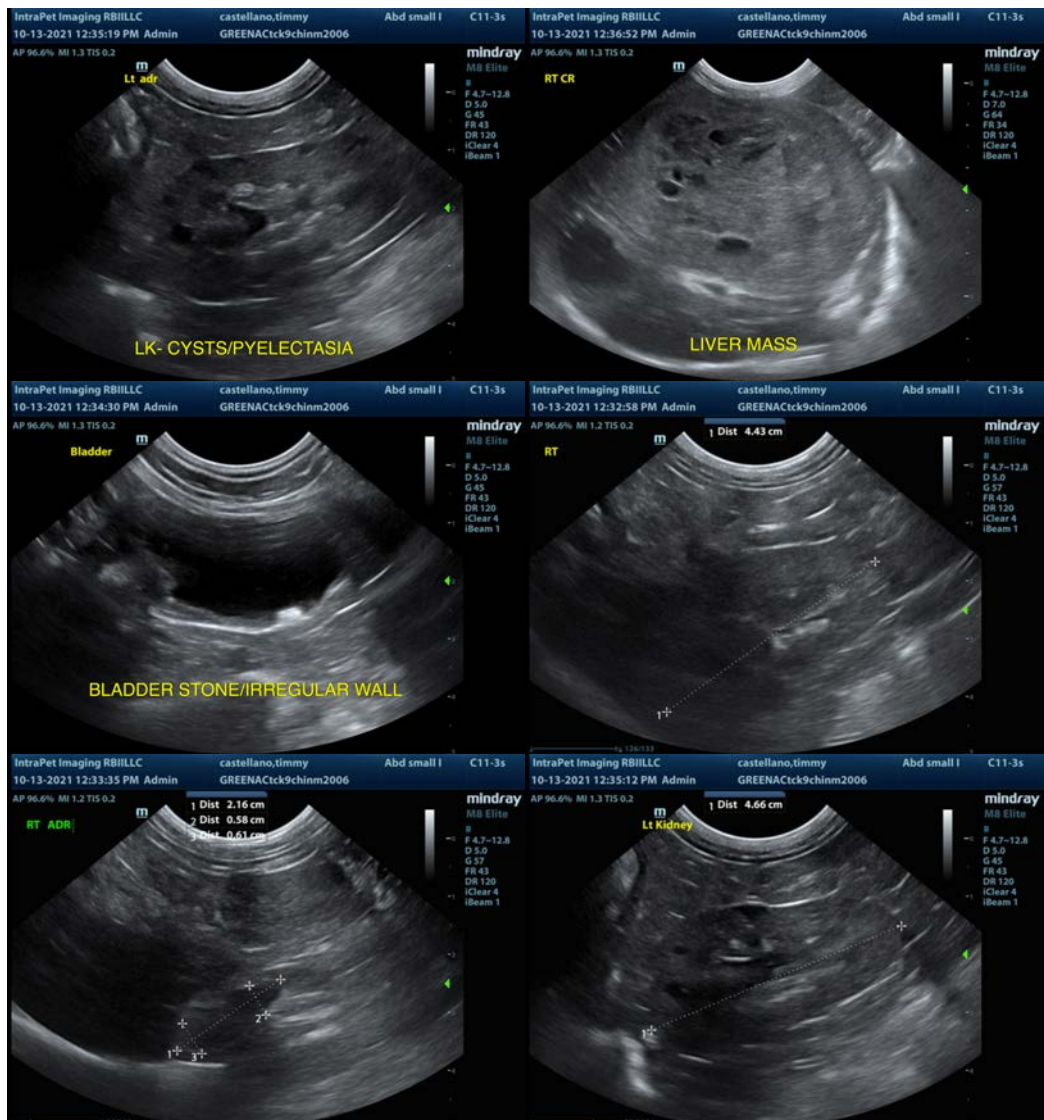
SECONDARY FINDINGS

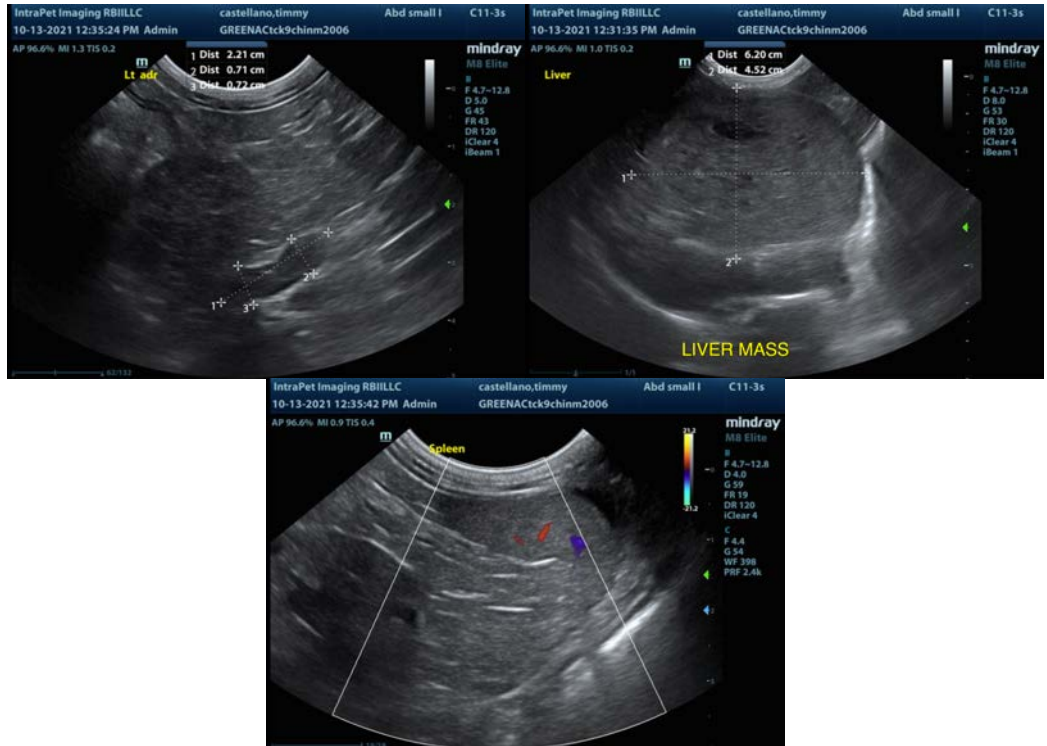
- Prominent, mottled pancreas – The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There is a large hepatic mass visualized. This is most consistent with a primary adenoma or carcinoma, although other possibilities exist. Consider advanced imaging (CT scan) to evaluate for possible surgical removal. Large primary hepatic masses can have a favorable prognosis with surgical removal.

Both kidneys are visually very abnormal. This correlates with the azotemia reported. Recommend blood pressure and urinalysis and culture to further evaluate. Mineralization is evident in the dependent portion of the urinary bladder, most consistent with a small bladder stone. Correlate with abdominal radiographs to try to determine size, and if cystostomy is recommended. Urinary bladder mucosa is somewhat irregular and should be monitored for progression. Recommend 3-view thoracic radiographs.





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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