

**DATE PRESENTING CLINICAL SIGNS**

10/4/21 History: Rechecking adrenal mass.
Current Medications: Not provided by the veterinarian.
Lab Results: Not provided by the veterinarian.

PATIENT Radiographs: Not provided by the veterinarian.
Date of Previous IntraPet Ultrasound: 4-8-2021; 2-22-2021.
Molly Hicks Sedation: Not needed.
Stat Report: Not requested.

SPECIES

Canine

BREED

Puggle

SEX

Spayed Female

AGE

8/29/08

WEIGHT

33.7 lbs

INTERPRETED BY

Kathleen Sennello
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ACVIM (Small Animal
Internal Medicine)

HOSPITAL NAME

Essex Middle River VH

REFERRING VET

Dr. Zulty

INVOICE

92165

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

The urinary bladder is mildly distended with anechoic urine. The bladder wall appears diffusely thickened and irregular measuring 0.32 cm. The area of the trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of mucosal irregularities, masses or cystic calculi. The findings are most consistent with inadequate urine distension or cystitis. I recommend urinalysis and culture.

The left kidney has a normal shape and size (4.98 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. A cortical cyst was noted and measured 0.39 cm along with a non-obstructive nephrolith. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (5.37 cm). Overall echogenicity is normal with adequate 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.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.38 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 large. There is a mass effect that measured 2.95 x 3.53 cm. Multiple, hyperechoic nodules were noted in the mass. The largest measured 0.87 cm (previous measurements 4/8/21 3.21 x 3.0 cm, 2/21 3.0 x 3.5 cm). The previous scan 6 months ago was suggestive of possible caval invasion/thrombosis. This mass deviates local vasculature and there is mild irregular vessel wall visualized, but a mass effect is not seen on today's scan.

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. No focal nodules or cystic lesions are observed. The gallbladder lumen is significantly distended with hyperechoic thickened adherent debris. Some areas of the gallbladder wall appeared thickened and edematous. The most prominent measured 0.82 cm near the neck of the gallbladder.

This material appears primarily non-organized, but in some areas there is mucosal stranding. This is suggestive of a mucocele. There was no evidence of bile duct dilation visualized.

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. The duodenum measured as normal (between 0.3-0.5cm in wall thickness) and the jejunum measured as normal (between 0.2-0.47cm.) 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

A scant amount of anechoic free fluid was noted. A mildly prominent, mesenteric lymph node was noted and measured 0.5 cm and a sublumbar lymph node measured 0.55 cm. A sublumbar lymph node measured 0.55 cm. The omentum is of normal echogenicity.

ULTRASONOGRAPHIC FINDINGS

PRIMARY FINDINGS:

- Large, right-sided adrenal mass with hyperechoic foci. This mass lesion is relatively stable in size/slightly larger with no evidence of obvious progression of a vascular lesion.
- Mildly irregular urinary bladder wall. The bladder mucosal changes could be consistent with cystitis or artifactual due to lack of adequate luminal distension. Bladder neoplasia cannot be ruled out but is considered unlikely in this patient.
- Gallbladder mucocele. In today's scan the gallbladder wall appears more prominent with some focal, thickened, hypoechoic areas. This is consistent with mild progression.

SECONDARY FINDINGS:

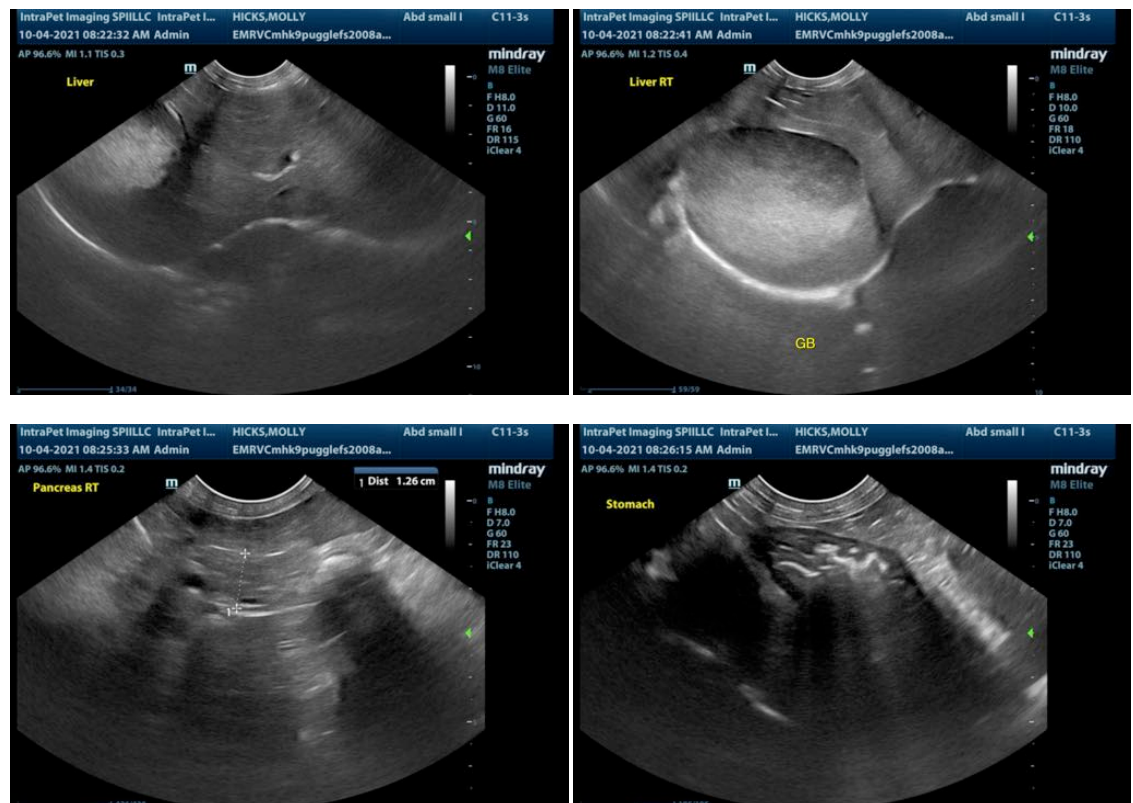
- The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.
- Mild, mesenteric lymphadenopathy. The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.
- Scant anechoic abdominal fluid.

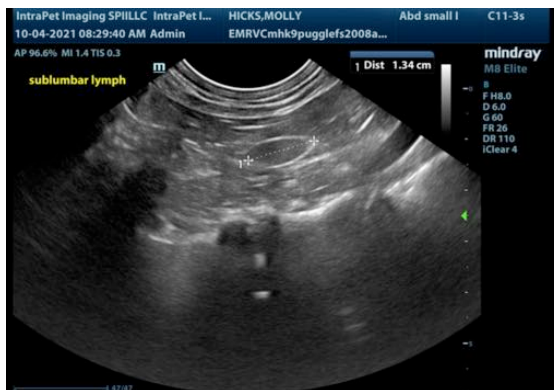
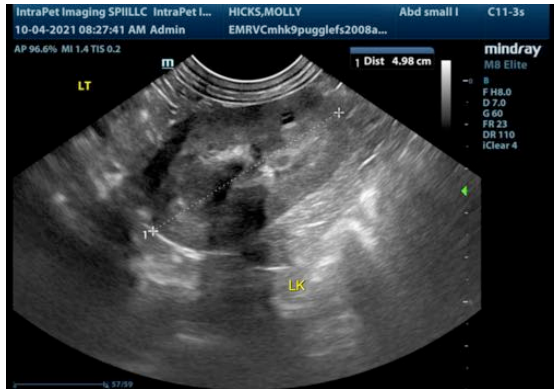
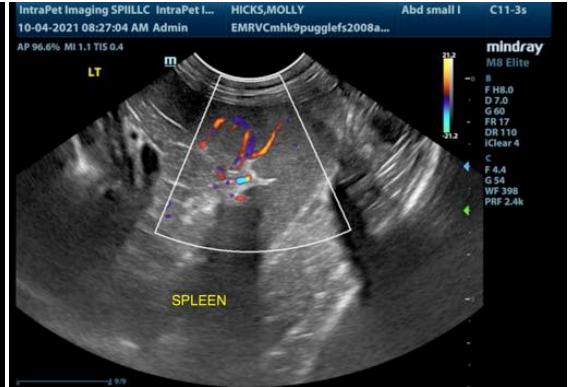
- Left-sided cortical renal cysts and mineralization/nephrolith. The hyperechoic mineralized foci observed at the corticomedullary junction of the left kidney are consistent with small, non-obstructive nephroliths.

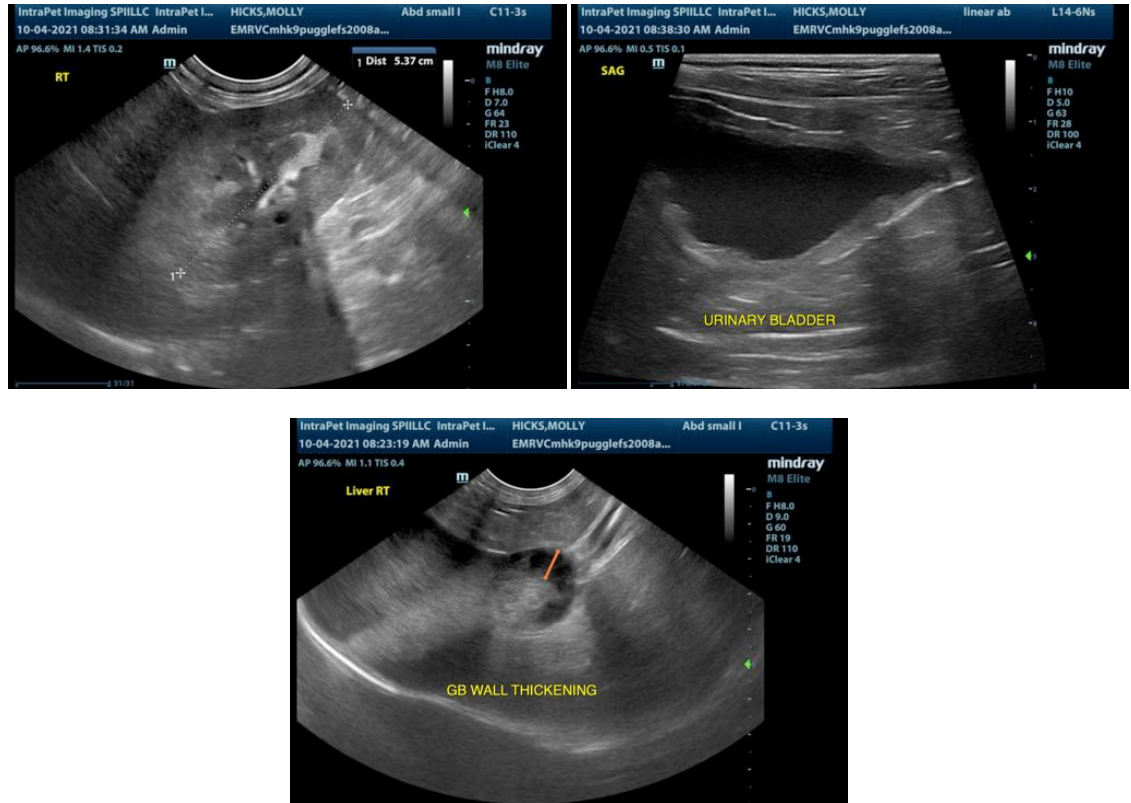
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Today's scan appears relatively stable from the previous scan. The previously visualized vascular lesion (mass/thrombus) was not seen on today's scan. There did appear to be some irregularity in the vessel wall in the area around the mass effect. Options at this point include advanced imaging to further evaluate for possible surgical intervention or continued monitoring.

Many of the other findings on today's scan are likely chronic progressive changes that are normal for age/circumstances. I do believe that the gallbladder looks slightly worse. I recommend starting Ursodiol if this has not already been done. I recommend a recheck if the liver values are stable. Additionally I recommend urinalysis and culture due to mild irregularity of the bladder wall. Consider three 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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