



DATE PRESENTING CLINICAL SIGNS

6/2/22 Was not eating well over the weekend. PE: slightly lethargic. Serum icteric.

PATIENT

Arlo Sullivan Current Medications: Enrofloxacin 22.7mg SID started 5/31. Cerenia 4mg SID started 5/31, Mirataz 1mg SID started 5/31, Denamarin- has been on/off for the last few months due to supply issues.

Lab Results: Elevations in all liver values as well as bilirubin.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: STAT Requested by DVM.

SPECIES

Feline

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

BREED

Urinary System

DLH

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 (4.96 cm) with pyelectasia at 0.50 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

9/12/05

WEIGHT

11.9 Pounds

The right kidney has a normal shape and size (4.4 cm) with pyelectasia at 0.20 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.

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.

IMAGING PERFORMED BY

Rachel Brillhart RDMS

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.

HOSPITAL NAME

Harborside Mobile VC

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. Hawkins

Liver

The liver is large in size and irregular. 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 partially cystic, hyperechoic, irregular mass lesion visualized deep in the liver, measuring 2.14 cm x 1.82 cm.

INVOICE

38174

The gall bladder is large. The wall of the gall bladder is not thickened and has a smooth mucosal surface. There is a moderate amount of non-organized echogenic debris. The common bile duct is tortuous and dilated with a thick wall. It measures at approximately 0.45 cm. As it extends distally, it is seen at the level of the duodenal papilla with a diameter of approximately 0.63 cm. This area has a soft tissue density most consistent with mucoid debris or an enlarged duodenal papilla.

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. Jejunum wall measured 0.35 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. There are occasional prominent mesenteric lymph nodes in the cranial abdomen, and the omentum is of increased echogenicity around the dilated bile duct.

PRIMARY FINDINGS

- Dilated gallbladder with moderate debris and a dilated, tortuous bile duct – most consistent with cholecystitis +/- a mucoid obstruction. An underlying neoplastic condition cannot be excluded.
- 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.
- Large, irregular, heterogenous liver with hyperechoic cystic mass lesion – Hepatic changes are non-specific and could be consistent with inflammation/infection (cholangiohepatitis), infiltrative neoplasia, lipidosis or other hepatopathy. The cystic mass lesion is concern for a cancerous lesion, although benign possibilities exist.
- 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.

SECONDARY FINDINGS

- Decreased corticomedullary distinction in both kidneys with bilateral pyelectasia – The bilateral renal findings are consistent with age-related change. Pyelectasia of the left/right kidney could be consistent with pyelonephritis, chronic renal disease, secondary to PU/PD or fluid therapy (if applicable), other.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The gallbladder is large and dilated with a moderate amount of echogenic debris. This extends into a dilated, thickened bile duct, which remains dilated to the level of the duodenal papilla. These findings are most

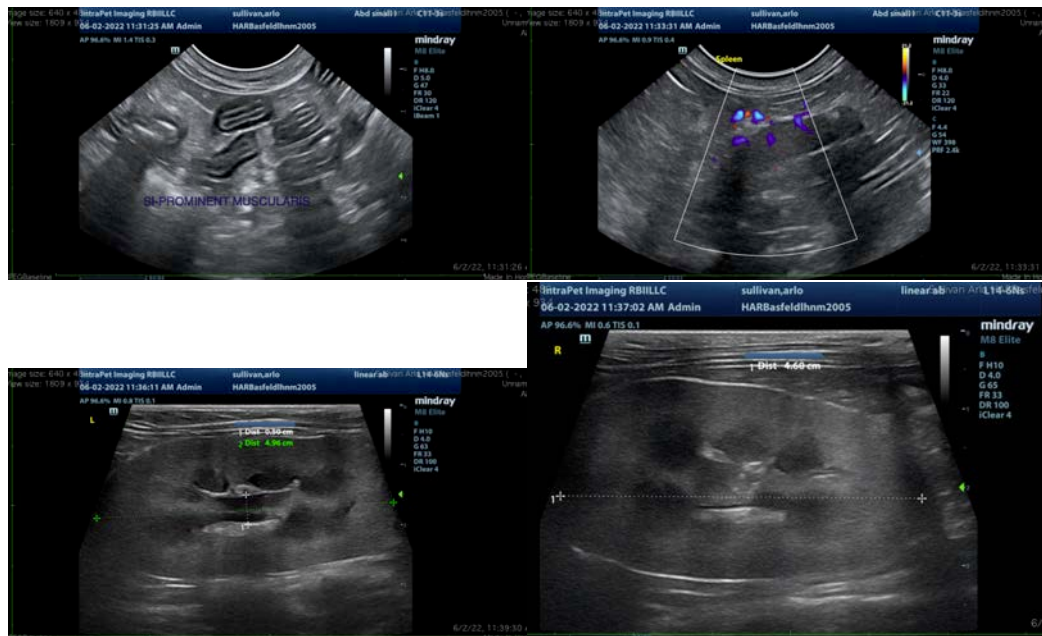
consistent with diffuse cholecystitis and/or an obstruction with biliary material and a thickened duodenal papilla. Recommend:

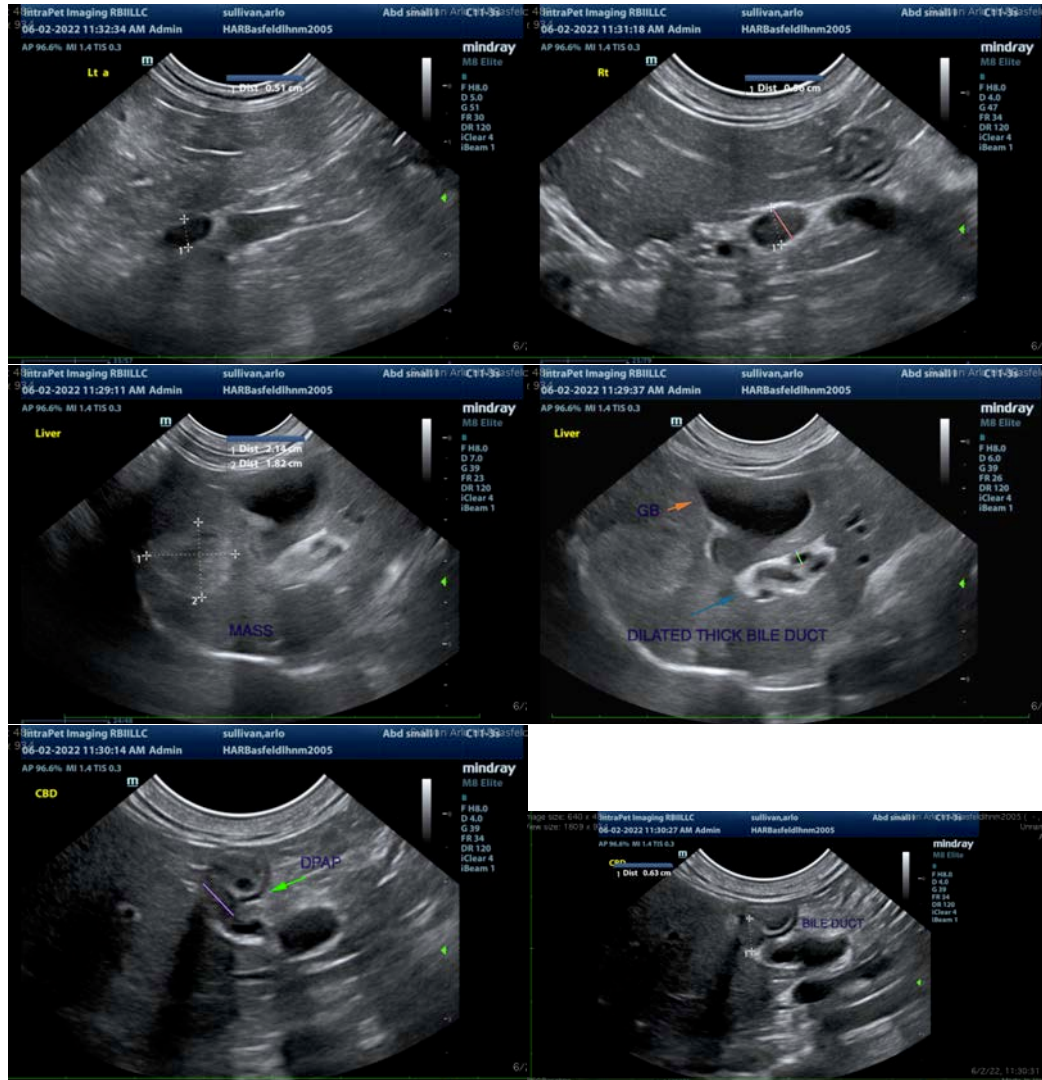
- Treatment for cholecystitis with IV fluids, antibiotics, Ursodiol, +/- an anti-inflammatory dose of steroids (after samples are obtained).
- Fine needle aspirate of the liver, provided coagulation parameters are normal.
- GI panel to Texas A&M for a qualitative fPLI, TLI, cobalamin and folate to look for evidence of possible Triaditis.
- If there is no response to medical management and continued serial monitoring with ultrasound, then surgical intervention may need to be considered.

There is a mass lesion within the liver. I suspect this would be difficult to sample due to its location. Recommend continued monitoring. If this patient is feeling better after medical therapy, then consider a contrast CT scan to evaluate for possible surgical removal, or continued monitoring with ultrasound.

The changes observed are consistent with chronic progressive disease, but there is moderate pyelectasia evident. Consider urinalysis and culture.

Consider three view thoracic radiographs to rule out concurrent thoracic disease/involvement.





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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