

**DATE PRESENTING CLINICAL SIGNS**

3/23/22

Patient presented for 3 days history of progressive lethargy and inappetence. P has been anorexic and has not had a bowel movement in two days. Vomited bile yesterday morning. Has been reluctant to stand and walk, seeming uncomfortable. Patient ~5% dehydrated on physical exam. Temperature 103.6 F. Patient stands with hunched appearance and outstretched neck, reluctant to walk in exam room. No orthopedic discomfort elicited or spinal hyperpathia noted. Marked discomfort on abdominal palpation (grunt and sit down) remainder of physical exam unremarkable.

SPECIES

Canine

Current Medications: Unasyn (30 mg/mL): 8 mL slow IV Q8h first dose given 3/22/22 at 1pm, Baytril (22.7 mg/mL): 4.4 mL diluted with 5 mL LRS and given slow IV Q24 h first dose given 4 pm. 3/22/22 Cerenia (10 mg/mL): 0.5 mL IV given 1pm 3/22/22, LRS given at 45 mL/hr 3/22/22.

BREED

Boston Terrier

Lab Results: Marked elevation of hepatic enzymes: ALT 1563 (125), ALP 1171 (212), GGT 16 (11), Tbili 1.1, Cholesterol 405 (320). Leukocytosis characterized by marked monocytosis and potential emerging left shift for neutrophils. WBC 17.08 (16.76), Neutrophils 8.04 (11.64) bands present, Monocytes 5.52 (1.12)

SEX

Female, spayed

Mild anemia, hematocrit 34% non-regenerative.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

AGE

6/26/2013

Imaging Performed By: Andi Parkinson, RDMS.

WEIGHT

22 lbs.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended with mostly anechoic urine. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

INTERPRETED BY

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The left kidney is normal size (5.18 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with normal corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

HOSPITAL NAME

Paradise AH

The right kidney is normal size (5.35 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with normal corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. A scant amount of retroperitoneal fluid is visualized.

REFERRING VET

Dr. Pound

Adrenal Glands

The left adrenal gland is normal size (0.64 cm at cranial pole) (0.65 cm at caudal pole) (1.99 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

INVOICE

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The right adrenal gland is normal size (0.64 cm at cranial pole) (0.64 cm at caudal pole) (2.27 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

Spleen

The spleen is subjectively normal in size (1.20 cm in width at the level of the hilus) with normal curvilinear peripheral contours. The parenchyma is slightly mottled in appearance with a few small (<0.50 cm) hypoechoic nodules/areas. Splenic vasculature appears normal with no evidence of thrombosis.

Liver

The liver is subjectively normal in size with normal contours and structure. There is appropriate echogenicity and echotexture. No overt structural evidence of inflammatory, infiltrative or regenerative pathology is evident. Vascular and biliary tracts are of normal volume with no evidence of congestion. No pathological hepatic lymphadenopathy observed.

The gall bladder lumen is distended. The wall is mildly thickened (up to 0.24 cm). A large amount of aggregated, echogenic to mineralized, partially dependent debris/sludge is observed within the lumen along with numerous small choleliths. The mesentery surrounding the gallbladder is hyperechoic. The cystic and common bile ducts are dilated. The common bile duct measures up to 0.54 cm. A small amount of debris is observed within its lumen. The common bile duct can be followed to the duodenal papilla which measures 0.54 cm in width.

Gastrointestinal

The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is not distended. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The pyloric outflow tract is patent. The small intestinal lumen is not dilated. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. No obstructive disease is noted.

Pancreas

The limbs and bae of the pancreas are visible with normal curvilinear peripheral contours. The parenchyma is largely isoechoic relative to surrounding omental fat and slightly mottled in appearance. The pancreatic duct is visible but not overtly dilated. There is no evidence of peripancreatic inflammation or effusion.

Free Abdomen

The mesentery in the cranial abdomen is hyperechoic. A small amount of echogenic free fluid is observed. The abdominal lymph nodes are normal/not visible.

Other

A brief echocardiogram reveals no evidence of pericardial effusion.

ULTRASONOGRAPHIC FINDINGS

Primary Findings:

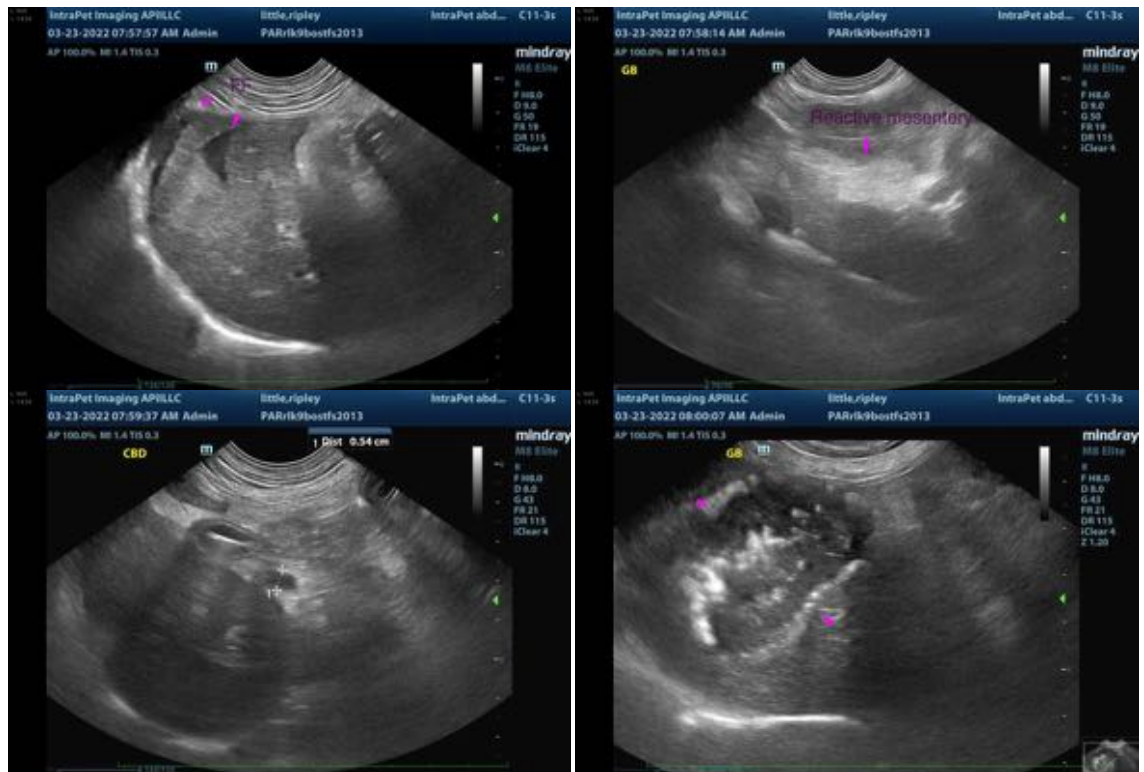
- The gallbladder changes are most consistent with cholecystitis. Non-obstructive choleliths are present. Regional peritonitis is present.

Secondary Findings:

- The splenic parenchyma changes are most consistent with a benign process such as lymphoid hyperplasia, extramedullary hematopoiesis or splenitis with a low possibility of infiltrative neoplasia (i.e., lymphoma, mast cell neoplasia).
- The pancreatic changes are suggestive of age-related remodeling. Low-grade pancreatitis may also be present.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Continued supportive care for acute cholecystitis/cholangiohepatitis is recommended including fluid therapy, broad spectrum antibiotics, pain medication, gastric protectants +/- antiemetics.
- Consider a cPLI to further assess for pancreatitis.
- Chest radiographs (three-view) are also recommended to evaluate cardiopulmonary status.
- If accessible, a fine needle aspirate of the free abdominal fluid is recommended with submission for analysis and cytology.
- Serial monitoring (i.e., daily) of the patient's liver values is recommended. If the total bilirubin increases, consider a repeat abdominal ultrasound to assess for an extrahepatic bile duct obstruction. If liver values continue to increase despite supportive care, an abdominal exploratory with a liver biopsy, aerobic and anaerobic bile cultures and assessment of bile duct patency may be warranted.





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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