

**DATE PRESENTING CLINICAL SIGNS**

10/15/21

PATIENT

Luna Caramone

History: Referral for Continued Care, Foreign Body. History: Date: 10-13-2021 Notes: Referral for elevated liver enzymes, anorexia 3 days, and weight loss. Was seen by rDVM today – Bloodwork showed significantly elevated LE and radiographs revealed a very small, thin wire-like FB in the abdomen. Referred for IVF and potential AUS on Friday. CHICKEN ALLERGY.

SPECIES

Canine

BREED

Mixed

SEX

Spayed Female

AGE

2008

WEIGHT

45.8 Pounds

INTERPRETED BY

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

HOSPITAL NAME

Animal Emergency
Hospital

REFERRING VET

Dr. Alayon

INVOICE

13781

Current Medications: Pantoprazole (Protonix) 40mg/vial Injection (Per mL), Amp/Sulb (Unasyn) 1.5gm Injection (Per mL), Denamarin Tablets 425mg, Vitamin B Complex Injection (Per mL), Buprenorphine 0.6mg/mL

Lab Results: attached

Radiographs: Lateral and VD abdomen - linear radiopaque foreign body remains evident in abdominal cavity. Does not appear to be in the intestinal tract.

Date of Previous IntraPet Ultrasound: No previous

Sedation: not needed

Stat Report: not requested

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.

The left kidney has a normal shape and size (6.53 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. Pinpoint non-obstructive nephroliths noted. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (6.33 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. Pinpoint non-obstructive nephroliths noted. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.75 cm. 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 0.58 cm. 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 large 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 gall bladder lumen is moderately distended. The wall of the gall bladder has moderate irregular polypoid projections and there is a moderate amount of non-organized echogenic debris. 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. The duodenum measured as normal and the jejunum measured as normal (0.3 cm.) Visualized peristalsis appears appropriate. The ileum appears prominent and measures 0.58 cm with a decreased detail of layering just proximal to the ileocecal junction.

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

Scant free fluid noted. No lymphadenopathy. The omentum is generally of increased echogenicity. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Large heterogeneous liver- The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy.
- Moderate gallbladder polyps- The significance of the gall bladder polyps and debris is unclear. This could represent an early mucocele, cholestasis, or chronic inflammation, or could be an incidental finding.
- Prominent ileum with decreased detailed layering proximal to the ileocecal junction- The bowel wall thickening could be consistent with inflammation, edema, or infiltrative neoplasia. A reduction in the detail of wall layering favors either severe intestinal disease or neoplastic infiltration. Biopsy is recommended.

Secondary Findings

- Prominent hypoechoic pancreas- The pancreatic changes are most consistent with mild pancreatitis or a recent episode of pancreatic inflammation.
- Non-obstructive nephroliths in both kidneys- The hyperechoic mineralized foci observed at the corticomedullary junction of the left/right kidney are consistent with small, non-obstructive nephroliths.

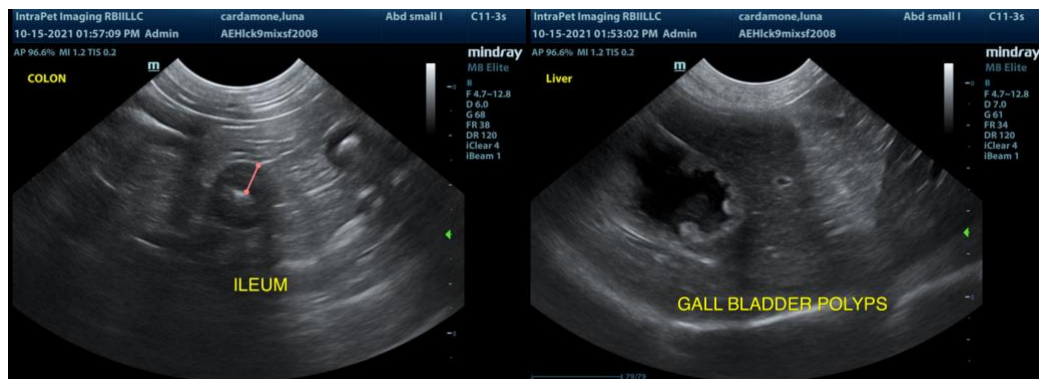
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

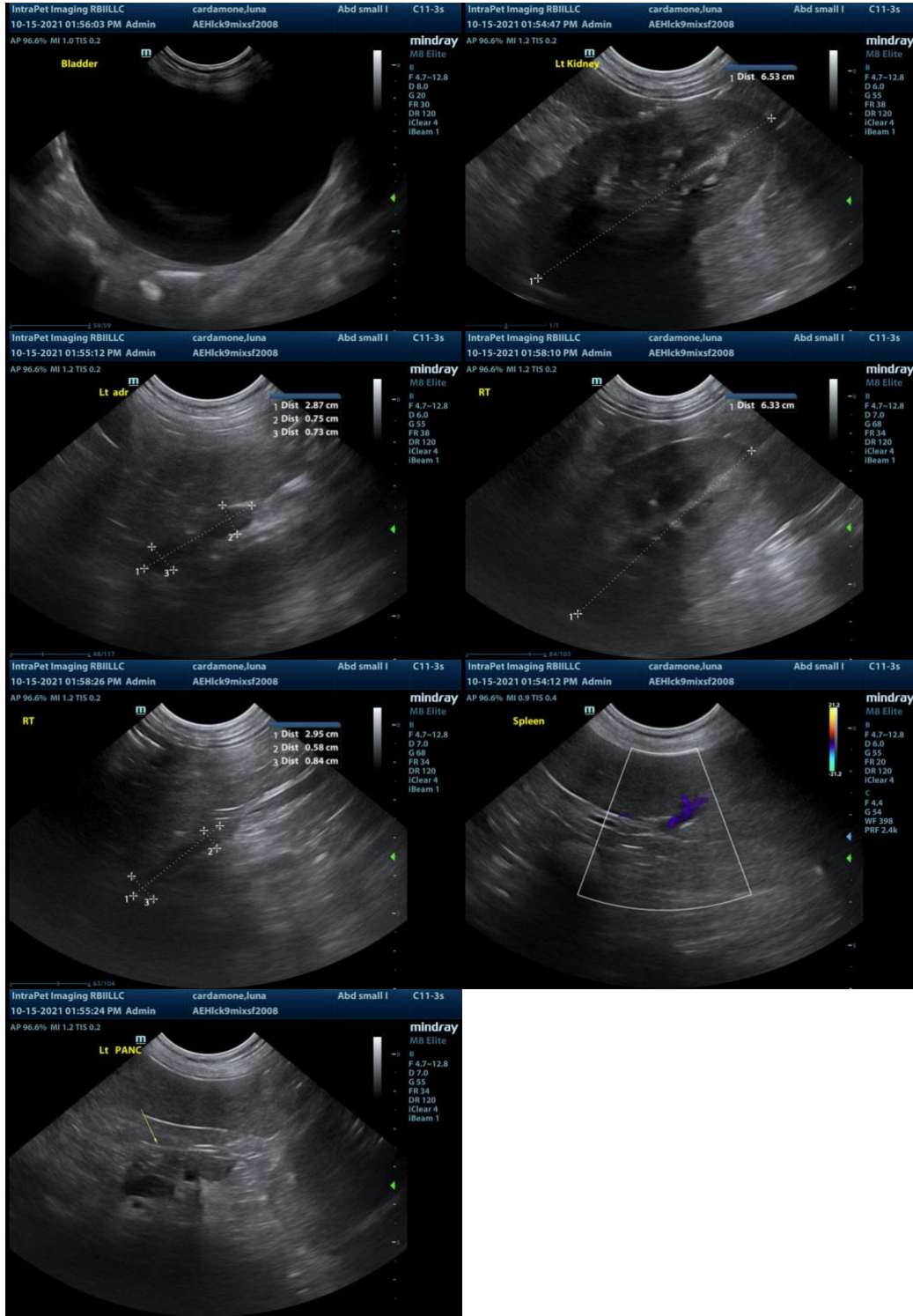
The liver appears large and heterogeneous. This is a non-specific change. No focal hepatic lesions were observed. Additionally, the gallbladder has many polypoid projections and appears somewhat inflamed.

- I recommend a liver function test to further evaluate liver function.
- Consider a fine needle aspirate to further evaluate for possible round cell neoplasia.
- I recommend a course of antibiotics and starting ursodiol with continued monitoring of the gallbladder.
- If symptoms of Cushing's are present, you could consider adrenal function testing. The adrenal glands are not overtly enlarged, but this does not rule out a diagnosis of Cushing's disease.

A section of ileum appears somewhat prominent and thickened. This can be normal in the area of the ileocecal junction, so the significance of this is unclear. I recommend continued monitoring with ultrasound and of clinical signs for vomiting or diarrhea/weight loss.

Any evidence of a wire abdominal foreign body was not seen. Ultrasound would likely be insensitive in picking this type of foreign material up. These small wire foreign bodies are common and often incidental, but occasionally they can cause issues. There is some inflammation/free fluid in the abdomen so this should be monitored. A CT scan could be considered if there was concern that the wire was causing issues.





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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