

**DATE PRESENTING CLINICAL SIGNS**

10/13/21

Seen 8/1 at the ER for profound anemia, fleas, and possible mycoplasma or IMHA. Treated with Prednisolone and Doxycycline oral soln. O finished both medications as Rx'd. Said P seemed to do better afterwards. Was doing well until a week prior to when he was seen by us 9/29. On PE on 9/29 pet was found to have a slight icteric integument; unkempt haircoat; Laryngeal cartilages palpate as if calcified/more brittle than normal, slight crepitus; Mildly icteric pinnae and Icteric 3rd eyelids. See bloodwork results below. Discussed with owner that best prognosis would be to seek ER referral and 24/7 care for IVF and further diagnostics. Also, disc'd less ideal option of aggressive supportive care and empirical therapy with frequent rechecks here. O opted to pursue latter option. Patient was given supportive care. (SQF; Cerenia; Rx Mirtazapine; Rx Cerenia PO TGH; Rx Hill's I/D and A/D; Rx Doxycycline oral soln 10mg/kg PO q24h x 14d; Rx Prednisolone oral soln 3 mg/kg PO q24h x 14d, then 1.5 mg/kg PO q24h x 14d, then call a vet for tapering instructions Patient returned for a recheck on 10/6: O reported pet not eating at all. Either vomiting or spitting up foam and oral liquid meds - O unsure which; Normal energy level. Normal BM and Ur;

On PE: Gums slight icterus. Sclera are icteric. Abdomen soft and compliant, no organomegaly or masses or ascites appreciated. Again referral was discussed but owner opts for supportive care. Owner interested in abdominal US however there was no option that did not require hospitalization. Patient continues to not eat at home and owner elected for US through our office

PATIENT

Mocha Merrill

SPECIES

Feline

BREED

Russian Blue

SEX

Neutered Male

AGE

9/28/16

WEIGHT

7.44 Pounds

INTERPRETED BY

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

Current Medications: SQF therapy 100mLs EOD started prior to first visit to us on 9/29. Mirataz Transdermal Ointment PRN started 9/29
Convenia 1mg/kg SQ given 10/6. Prednisolone started 10mg PO on 10/6 with taper to 5mg PO after 7 days.
Lab Results: 9/29/21: CBC - HCT 22%, mild reticulocytosis, elevated RDW, neutropenia (1.9K), leukopenia (3K), mild incr PLT
Chem - incr GGT (14) and T bili (2.8), ALP 783, ALT is WNL
Lytes - mild decr Cl otherwise WNL 10/6/2021: PCV 40%. TS 7.0
CBC: decreased MCV and MCH; mild reticulocytosis; Decreased reticulocyte hemoglobin; slightly decrease WBC count, neutropenia (2.246K), elevated platelets (1,156K). Chem --> Tbili 2.2 (2.8 on 9/29), ALP 700's (similar), GGT 17 (up from 14 on 9/29); Lytes --> hypochloridemia, hypokalemia.
Radiographs: Not provided by the veterinarian.
Date of Previous IntraPet Ultrasound: Not provided by the veterinarian.
Sedation: Gabapentin 30mg PO upon arrival to the hospital.
Stat Report: not requested

HOSPITAL NAME

Westminster VH

REFERRING VET

Dr. Hall

INVOICE

26249

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

The urinary bladder is moderately distended with mild primarily suspended echogenic debris present. 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 calculi. Echogenic debris of this type can be associated with small crystals, cellular debris and proteinaceous debris.

The left kidney has a normal shape and size (3.67 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.

The right kidney has a normal shape and size (3.79 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 0.43 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 normal in size measuring 0.42 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. The spleen echotexture is heterogenous and mottled, 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 large in size with smooth peripheral margins. The parenchyma is hyperechoic and homogenous in echotexture. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed.

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 <0.36cm 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 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. Jejunum wall measured 0.17 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, hyperechoic liver – Hepatic changes are non-specific and could be consistent with hepatic lipidosis, inflammatory/infectious disease, infiltrative neoplasia, or other hepatopathy.

- Mildly mottled spleen – The diffuse splenic changes are non-specific and could be consistent with lymphoid hyperplasia, extramedullary hematopoiesis, infiltrative neoplasia, inflammation, other. Cytology or histopathology would be necessary to get a definitive diagnosis.

SECONDARY FINDINGS

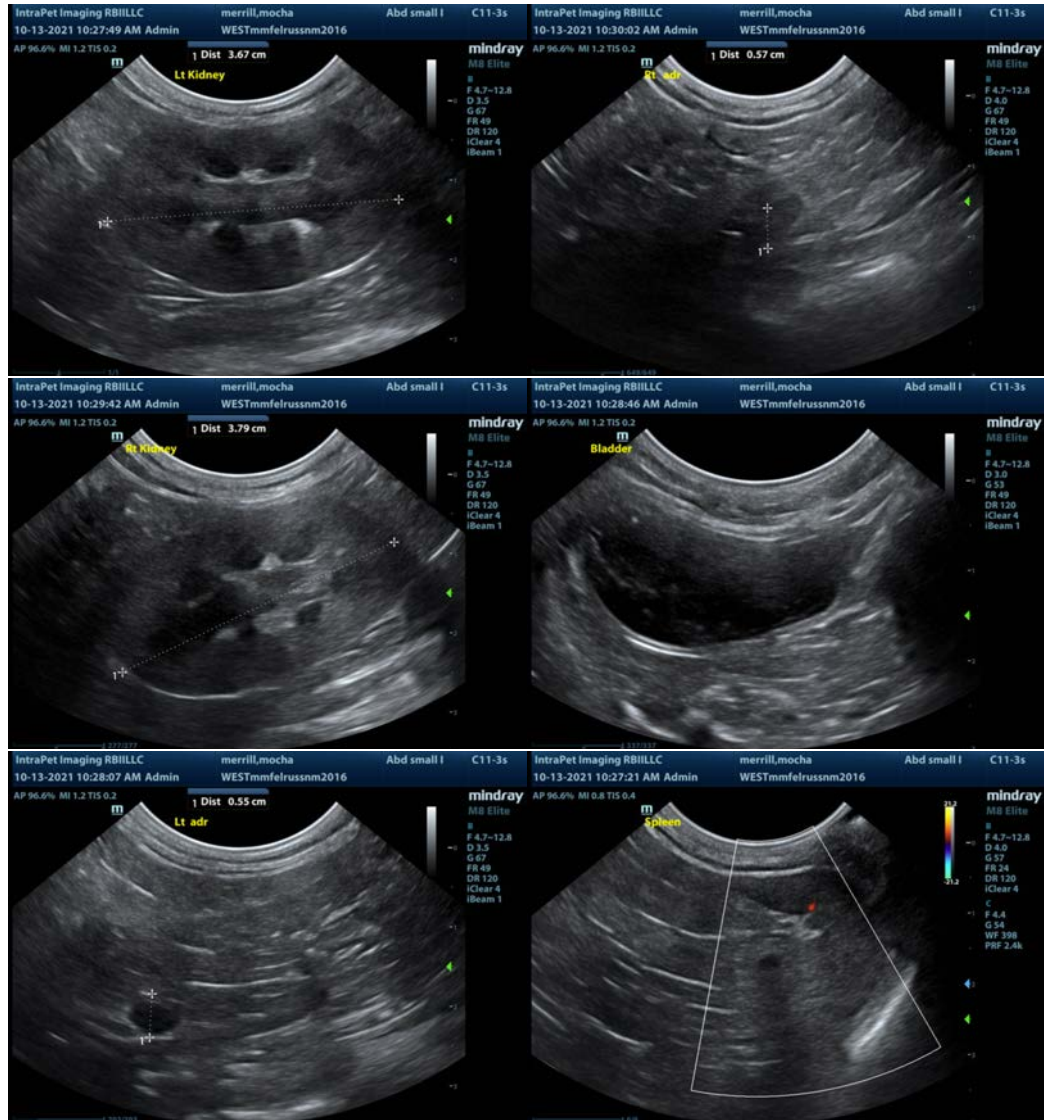
- Echogenic debris in the urinary bladder – The echogenic debris in the bladder lumen could be consistent with cells, crystals, and/or mucus.
- Prominent, mottled pancreas – The pancreatic changes are most consistent with mild pancreatitis or a recent episode of pancreatic inflammation.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

No evidence of focal mass lesions or lymphadenopathy noted on today's scan. The liver is large and hyperechoic. This could be consistent with fatty infiltration, but given the history, you could consider a fine needle aspirate to further evaluate for possible underlying round cell neoplasia. The changes observed in the spleen are most likely associated with regeneration, etc., but a fine needle aspirate could be considered here as well.

Based on the history, a hemolytic anemia seems most likely, either due to hemoparasites or immune mediated disease (or both). Consider a vector borne disease panel to NC State's vector borne disease lab, which will also screen for bartonella and less typical infections. Recommend a course of Doxycycline (with care to prevent esophageal stricture) and immunosuppressant while awaiting vector borne disease testing. If this is truly an autoimmune disease, many cats will require more than just one immunosuppressant, but it is important to try to rule out infectious disease. Recommend pathologist review of a CBC. If there is significant cytopenia and a non-regenerative anemia, recommend bone marrow sampling, as primary bone marrow disease could be considered as well. 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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