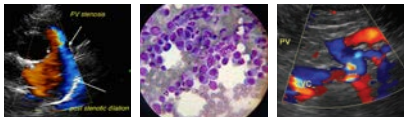
IMAGING PERFORMED BY

IntraPet.com



SonoPath
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DATE

1/5/23

PATIENT

Hulk Norris

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

4/25/13

WEIGHT

7.92 Pounds

INTERPRETED BY

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

HOSPITAL NAME

Everhart Vet Hospital

REFERRING VET

Dr. Notarangelo

INVOICE

43980

PRESENTING CLINICAL SIGNS

Pet has not been seen at EVH for >5 years. Rapid weight loss over past few months, 2 pounds alone in last month, presented 12/30/22 for vomiting and anorexia. Large mid abdominal mass palpated on exam. Owner may be interested in surgical/chemotherapeutic options so advised further work-up. Was seen at another vet last month and possible heart murmur ausculted but no records for review. No heart murmur ausculted on Friday 12/30/22 visit but owner is interested
in bicavitary study in case of surgery. Labs NSF and thus far, pet is responding well to cerenia and mirtazapine.

Current Medications: RX: 12/30/22: cerenia 8 mg SID, miratraz transdermal SID
Lab Results: 12/30/22: NSF, T4 3.4.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Rachel Brilhart, RDMS.

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 (3.89 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal 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 (4.25 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The region of left adrenal (Cranial to left renal artery) is unremarkable but the adrenal is not distinctly visualized. No evidence of a mass effect.

The right adrenal gland is normal in size measuring 0.46 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 (0.83 cm), 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 large in size, and hypoechoic 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 moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are mild and 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 uniform diameter with minimal fluid distension. Wall thickness is severely increased. Bowel loops follow a typical curvilinear path. Some areas have reduced detail of wall layering with significant thickening and mucosal speckling, as well as a severely prominent muscularis layer. Duodenum wall measured 0.51 cm. “Normal” jejunum wall measured 0.40 cm. Visualized peristalsis appears appropriate. There is severe diffuse thickening, but there are multiple areas with asymmetrical loss of layering. In this area, the bowel wall measures at 1.12 cm. A focal bowel mass is visualized measuring 2.03 cm x 1.99 cm.

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 normal and isoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

Free Abdomen

There is a small amount of free abdominal fluid. There is a severe lymphadenopathy present with diffuse enlargement. There is a cluster near the ileocecal junction measuring 0.58 cm and 0.66 cm in width, as well as a large cluster at the mesenteric root, and a mass effect measuring 6.49 cm x 3.55 cm. The omentum is generally of increased echogenicity.

ULTRASONOGRAPHIC FINDINGS

- Large, hypoechoic, 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.

- Diffusely thickened small intestine with focal areas of asymmetrical wall thickening, complete loss of layering, and focal bowel masses – Findings are highly concerning for round cell neoplasia. Other differentials are possible.

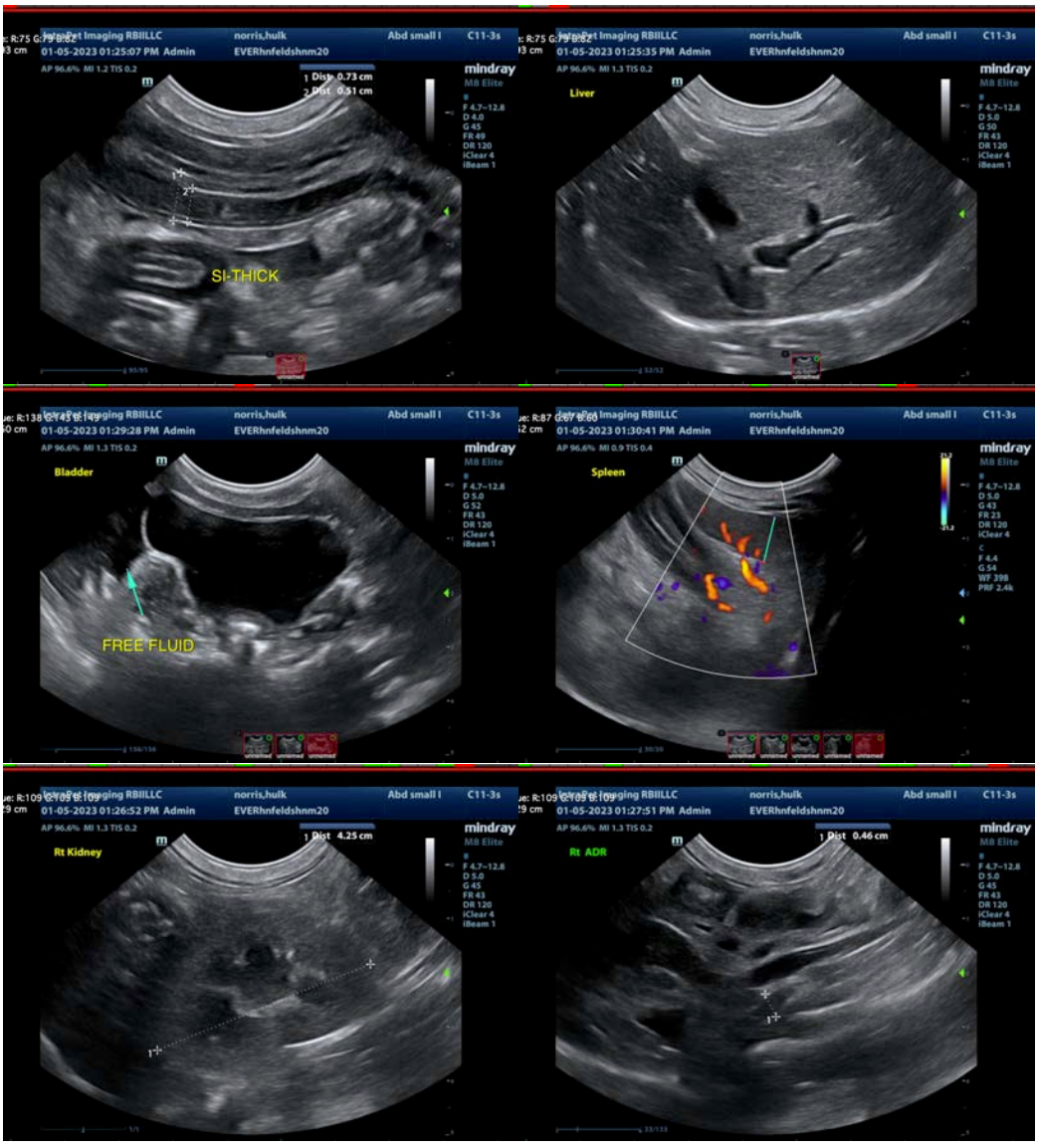
- Severe mesenteric lymphadenopathy with a mid-abdominal mass effect (likely enlarged lymph node) – The severe mesenteric lymphadenopathy is most concerning for a neoplastic process, although you can see significant lymphadenopathy in some cases of autoimmune/inflammatory disease, infectious disease (tick born disease-such as bartonella, fungal infections, FIP (cats)) etc. A fine needle aspirate with cytology is recommended for further evaluation.

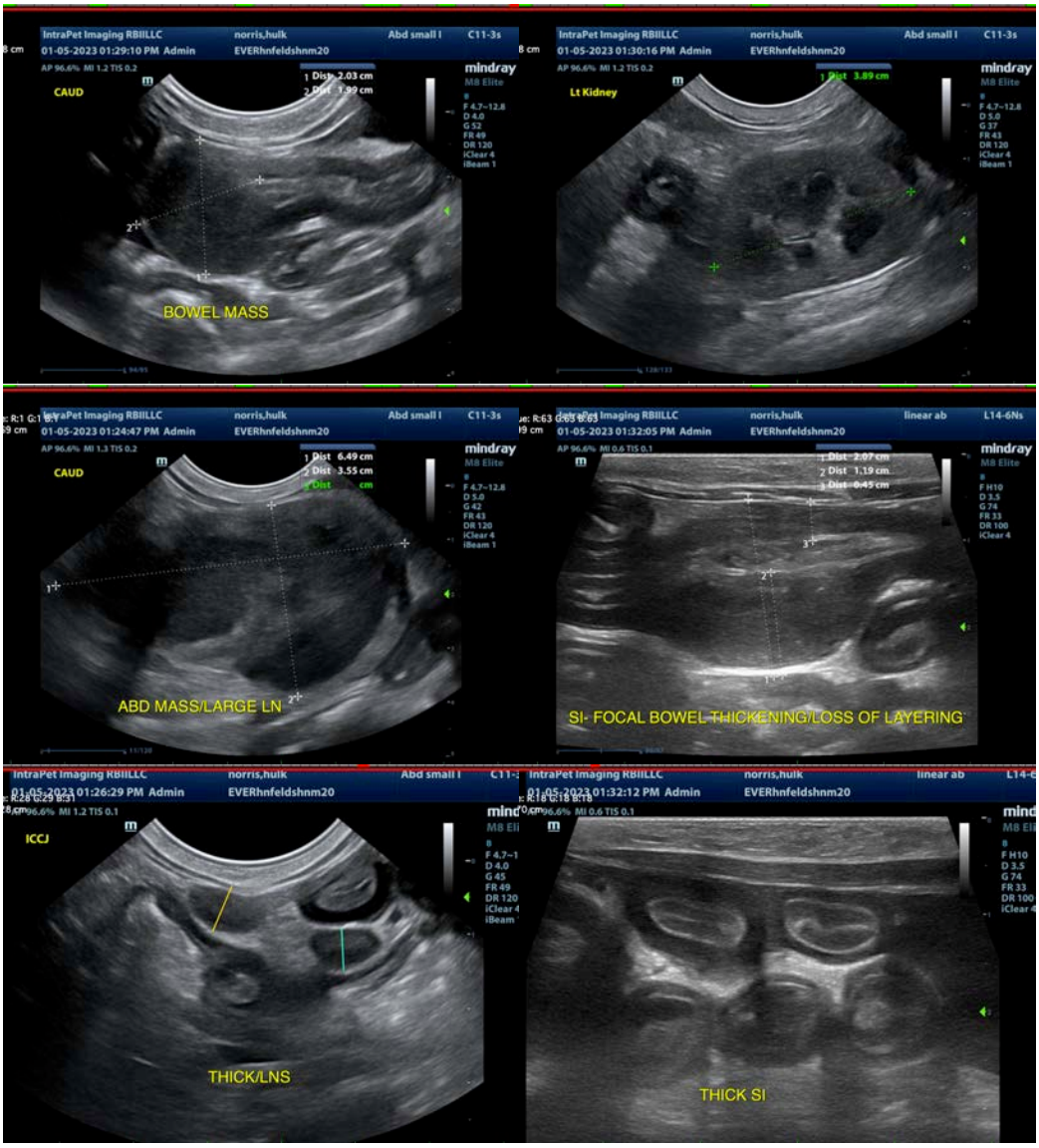
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The combination of the generalized bowel thickening, the focal bowel masses, and the severe lymphadenopathy is highly concerning for underlying round cell neoplasia. Recommend a fine needle aspirate of thickened bowel wall and an enlarged mesenteric lymph node. These lesions are unlikely to be surgical

lesions, as they are multifocal, but consultation with a veterinary oncologist regarding chemotherapeutic options is advised (provided the diagnosis is confirmed).

If not already done, recommend 3-view thoracic radiographs.





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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