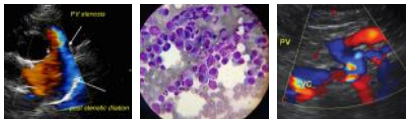
IMAGING PERFORMED BY

IntraPet.com



SonoPath
Clinical Sonography & Telecytology
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DATE

3/13/23

PATIENT

Snuggles Walker

SPECIES

Canine

BREED

Mixed Breed

SEX

Spayed Female

AGE

4/1/2008

WEIGHT

23.8 Pounds

INTERPRETED BY

Beth Johnson, DVM DACVIM

HOSPITAL NAME

Fork VH

REFERRING VET

Dr. Doherty

INVOICE

21627

PRESENTING CLINICAL SIGNS

History: Significant weight loss (4.0 lbs) over the past 2 - 3 months. Diminished body condition and loss of muscle mass with a recent onset of significant decline in water consumption and appetite. Owner feeding home cooked food now with water added to get the dog to drink. Dog has developed lethargy as well. No vomiting/diarrhea per owner. Recent blood profile (3/7/23) showing a diminished protein level when compared with blood sample of (10/30/22) but no evidence of proteinuria or other urinary tract issues. Physical examination: CV- sinus rhythm with strong femoral pulses but Grade 2/6 holosystolic murmur(long standing finding dating from (9/2021) with no clinical signs of CHF. Abd. - slightly distended with a palpable spleen (no obvious mass noted and no pain or discomfort). M/S - lean body condition with obvious loss of generalized muscle mass, slightly pendulous abdomen. Neuro.- quiet and subdued behavior, no deficits. LN- no enlarged peripheral nodes.

Current Medications: Cerenia 24 mg QD; Pepcid AC 5.0 mg BID
Lab Results: Protein (total): 10/30/22 - 6.1 g/dl, 3/07/23 - 5.4. Album : 10/30 - 3.2 g/dl, 3/07 - 2.6. ALT: 10/30 - 55 U/L, 3/07 – 165. ALKP: 10/30 - 119 U/L, 3/07- 180. Baseline cortisol level - pending
Radiographs: Splenomegaly but no obvious mass; +/- enlarged or dilated stomach with thicken pylorus.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Declined. Required for further imaging.
Stat Report: Not requested.
Imaging Performed By: Rachel Brilhart, RDMS.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

Urinary bladder is only mildly distended (empty). Visible contents are anechoic. Urinary bladder wall is unable to be fully assessed for pathology without further distension. No visible masses or cystoliths are observed. The trigone and visible pelvic urethra are normal thickness with a smooth mucosal surface.
If there are urinary signs and/or concern for urinary bladder pathology, reassessment after complete filling is recommended.

Left kidney is normal in size (5.74 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

Right kidney is normal in size (5.07 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

Adrenal Glands

Left adrenal gland is normal in size (2.16 cm long x 0.95 cm at cranial pole and 0.86 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Right adrenal gland is normal in size (1.84 cm long x 0.62 cm at cranial pole and 0.68 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Spleen

Spleen is subjectively large in size with normal smooth margins. Parenchyma is normal in echogenicity with a coarse/heterogenous echotexture. No focal nodules or masses are observed. Splenic vasculature appears normal.

Liver

Liver is subjectively enlarged (swollen contour). Mild parenchymal remodeling with diffusely mildly coarse architecture and increased portal markings is present. No focal nodules or masses are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.

Gastrointestinal

The visible stomach wall is normal in thickness and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

The visible small intestine demonstrates areas of thick muscularis layer relative to mucosa (disruption of the normal 1:3 muscularis:mucosa ratio). Small intestinal submucosa is slightly irregular, thick and hyperechoic, without evident loss of layering appreciated. The lumen of the small intestine is empty with no evidence of obstruction or foreign material.

The visible colon is normal in wall thickness and layering. Contents are consistent with normal formed feces and gas.

Pancreas

The observed pancreas appears appropriately isoechoic to surrounding omental fat. The capsule is mildly irregular in shape. Parenchyma is mildly heterogenous and coarse. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

Free Abdomen

There is no evidence of peritoneal effusion. The mesenteric and cranial abdominal lymph nodes were enlarged with swollen irregular capsular contour and loss of normal length to width ratio (rounded in shape). Nodes are hypoechoic with loss of normal parenchymal detail.

ULTRASONOGRAPHIC FINDINGS

- Gastrointestinal lymphoma (suspect) pattern – Thick muscularis has been reported with infiltrative bowel disease including both benign inflammatory disease as well as infiltrative neoplasia such as lymphoma. Given the concurrent pathology noted, infiltrative neoplasia is considered more likely, but benign IBD cannot be ruled out without tissue sampling.

- Aggressive mesenteric and cranial abdominal lymphadenopathy- most consistent with infiltrative round cell or metastatic neoplasia. A benign aggressive inflammatory response cannot be ruled out without tissue sampling +/- culture.

- Hypoechoic hepatomegaly-This appearance is consistent with an acute hepatopathy or acute cholangiohepatitis. Infiltrative neoplasia (round cell neoplasia) should also be considered.

- Coarse splenomegaly – can be associated with congestion caused by sedation (if sedated) but can also be associated with diffuse infiltrative disease. Both benign conditions such as extramedullary

hematopoiesis, lymphoid hyperplasia, as well as infiltrative neoplastic diseases such as round cell neoplasia should be considered.

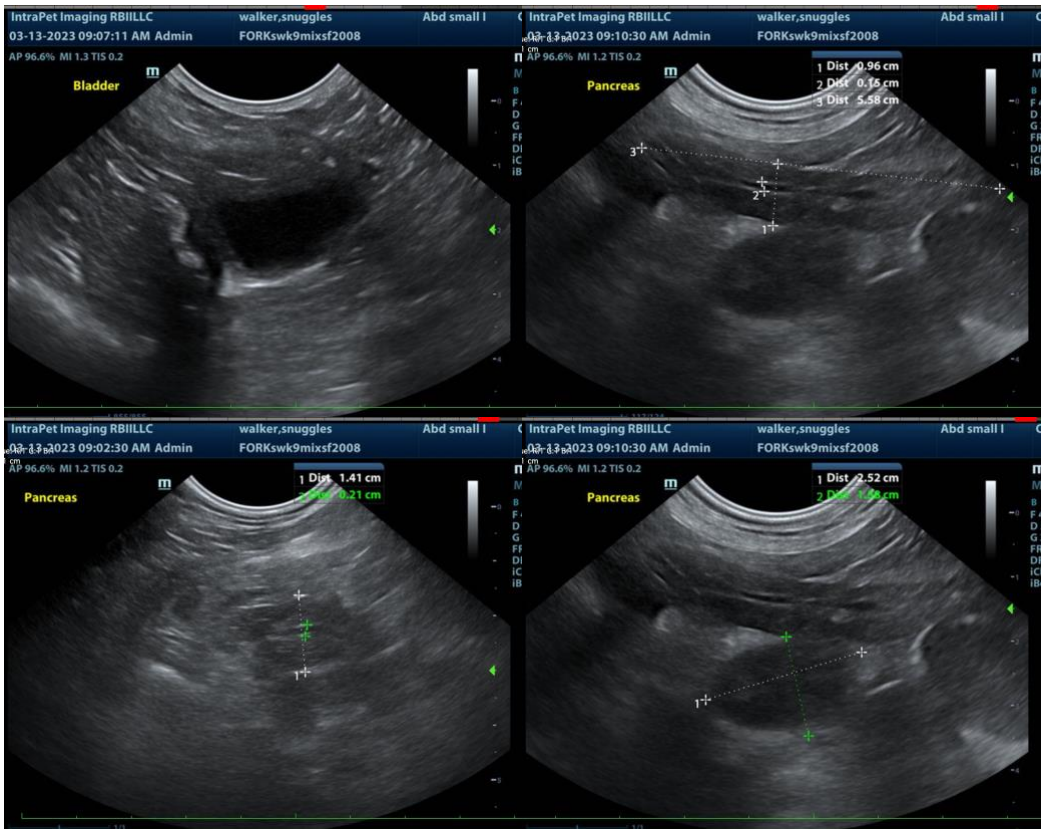
- Pancreatic age-related remodeling – Mild irregularities are consistent with benign age-related change. Low-grade smoldering chronic pancreatitis cannot be ruled out and should be suspected in the face of appropriate clinical signs.

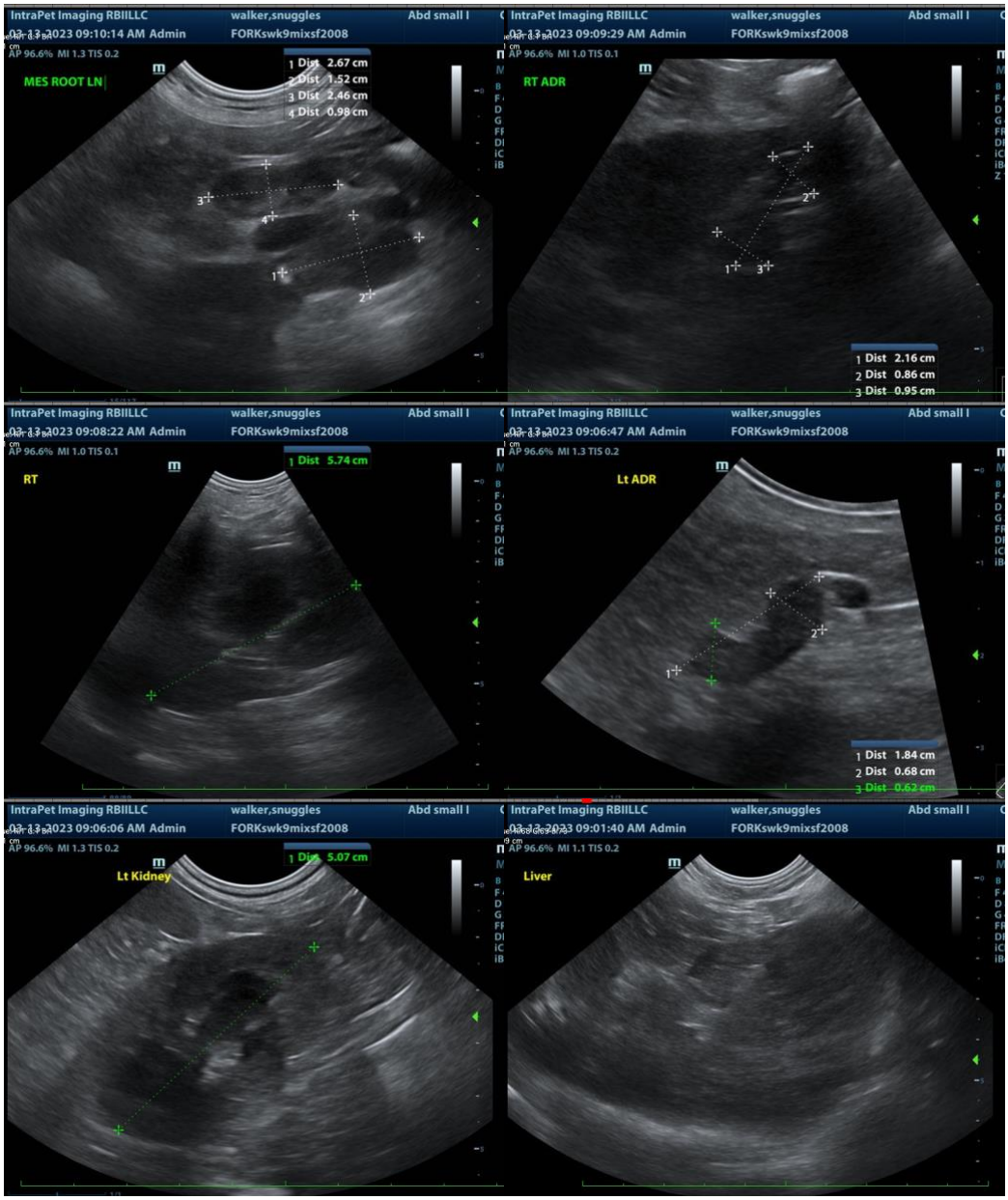
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

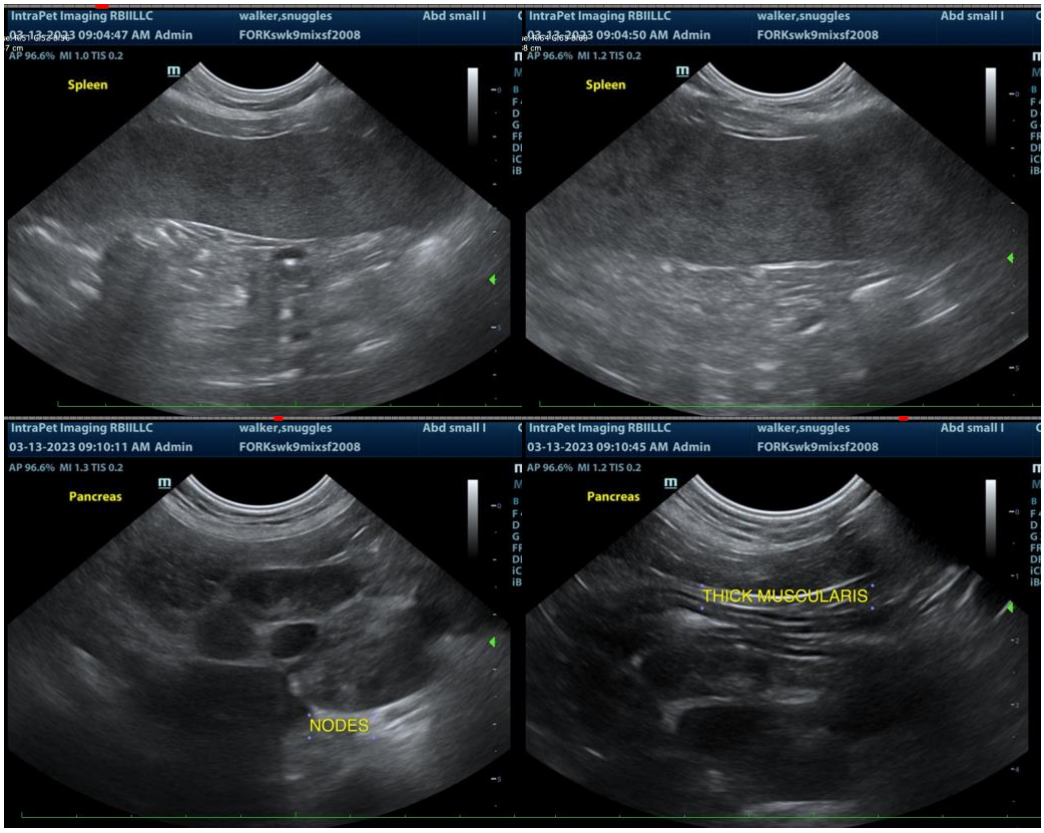
Top differential for this patients underlying disease process, resulting in decreased appetite, weight loss, etc., is infiltrative neoplasia, such as lymphoma. Recommendations include fine needle aspirates of the enlarged lymph nodes, as well as the liver +/- the spleen, if patients coagulation status is appropriate.

Additionally, a gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory is recommended for further evaluation of GI and pancreatic function.

In the meantime, symptomatic/supportive medical management of clinical signs is recommended in the form of antiemetics, gastroprotectants, and an appetite stimulant +/- fluid therapy, if clinically indicated.




IntraPet Imaging RBIILLC
walker,snuggles
Abd small I
FORKswk9mixsf2008
MES ROOT LN
1 Dist 2.67 cm
2 Dist 1.52 cm
3 Dist 2.46 cm
4 Dist 0.98 cm
RT ADR
1 Dist 2.16 cm
2 Dist 0.86 cm
3 Dist 0.95 cm
RT
1 Dist 5.74 cm
Lt ADR
1 Dist 1.84 cm
2 Dist 0.68 cm
3 Dist 0.62 cm
Lt Kidney
1 Dist 5.07 cm
Liver



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.

Beth Johnson, DVM DACVIM
Beth.Johnson@SonoPath.com