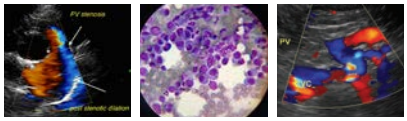
IMAGING PERFORMED BY

IntraPet.com



SonoPath

Clinical Sonography & Telecytology

EDUCATIONAL TELECONSULTATION SERVICES™

1-800-838-4268 info@sonopath.com SonoPath.com

DATE

6/20/23

PATIENT

Zelda Sample

SPECIES

Canine

BREED

Mixed Breed

SEX

Intact Female

AGE

2/28/17

WEIGHT

46 Pounds

INTERPRETED BY

Beth Johnson, DVM DACVIM

HOSPITAL NAME

Timonium AH

REFERRING VET

Dr. Montessi

INVOICE

43301

PRESENTING CLINICAL SIGNS

Weight loss, PU/PD, Vomiting, Diarrhea, hyporexia. Hx of multiple MCTs (dermal and SQ), hypothyroidism
Light pink MM, generalized muscle wasting and multiple SQ and dermal masses- 1 ulcerated.

Current Medications: Thyroxine 0.6mg BID x 12 months, Cerenia 40mg SID x 3 days, Visbiome x 3 days Metronidazole 250mg BID x 3 days, Prednisolone 20mg/day (1mg/kg/day) x 3 days.
Lab Results: CBC- moderate, regenerative anemia (HCT 30%, retic 179k [<110]). Marked lymphocytosis 16k r/o lymphocytic leukemia vs lymphoma vs antigenic stim. vs open. Thrombocytopenia 67k (>150k) r/o loss vs destruction vs decreased production vs open. Chem- Hypocalcemia 7.3 (>7.9), Panhypoproteinemia 3.4 (> 5.2), Alb 1.4, Glob 2.0, Hypocholesterolemia, Na/K/Cl WNL, ALT 133. in house U/A: usg 1.005 – isosthemuria, pH 8.0, Protein 1+, No evidence of bacteria, WBCs or RBCs.
Radiographs: TXR- NSF. AXR: moderate gas dilation of colon, mild gas filled loops of bowel- Suspect soft tissue mass effect mid-abdomen. AFAST: Mass effect mid-abdomen- suspect mesenteric LNs, Scant FF seen. Subjectively hyperechoic mesentery.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Andi Parkinson, BS, RDMS.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is moderately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

The right kidney is normal in size (6.84 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.

The left kidney is normal in size (6.03 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

The right adrenal gland is normal in size (1.92 cm long x 0.50 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal. The cranial pole is difficult to fully visualize in these images.

The left adrenal gland is normal in size (1.55 cm long x 0.53 cm at the cranial pole and 0.57 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

Spleen

Spleen is subjectively large in size with a mildly swollen but smooth capsule. Parenchyma is normal and homogenous in echogenicity and echotexture. No focal nodules or masses are observed. Splenic vasculature appears normal.

Liver

Liver is subjectively enlarged (swollen contour) without disruption of architecture. It has a normal homogenous echotexture. Parenchyma is diffusely hyperechoic characterized by less prominent than normal

portal vein walls and increased echogenicity relative to the spleen and falciform fat. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

The 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 stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) 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 intestines are normal in wall thickness and layering (canine duodenum < 0.5 cm and feline duodenum < 0.4 cm; other < 0.3 cm). Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

Pancreas

The pancreatic parenchyma is appropriately isoechoic to surrounding tissue. Visible capsule is smooth and normal in contour. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

Free Abdomen

There is a scant amount of anechoic free fluid noted in these images.

Lymph nodes are diffusely 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

- **Diffuse aggressive lymph nodes –** most consistent with infiltrative round cell or metastatic neoplasia. A benign aggressive inflammatory response cannot be ruled out without tissue sampling +/- culture.

- **Hypersplenism –** 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.

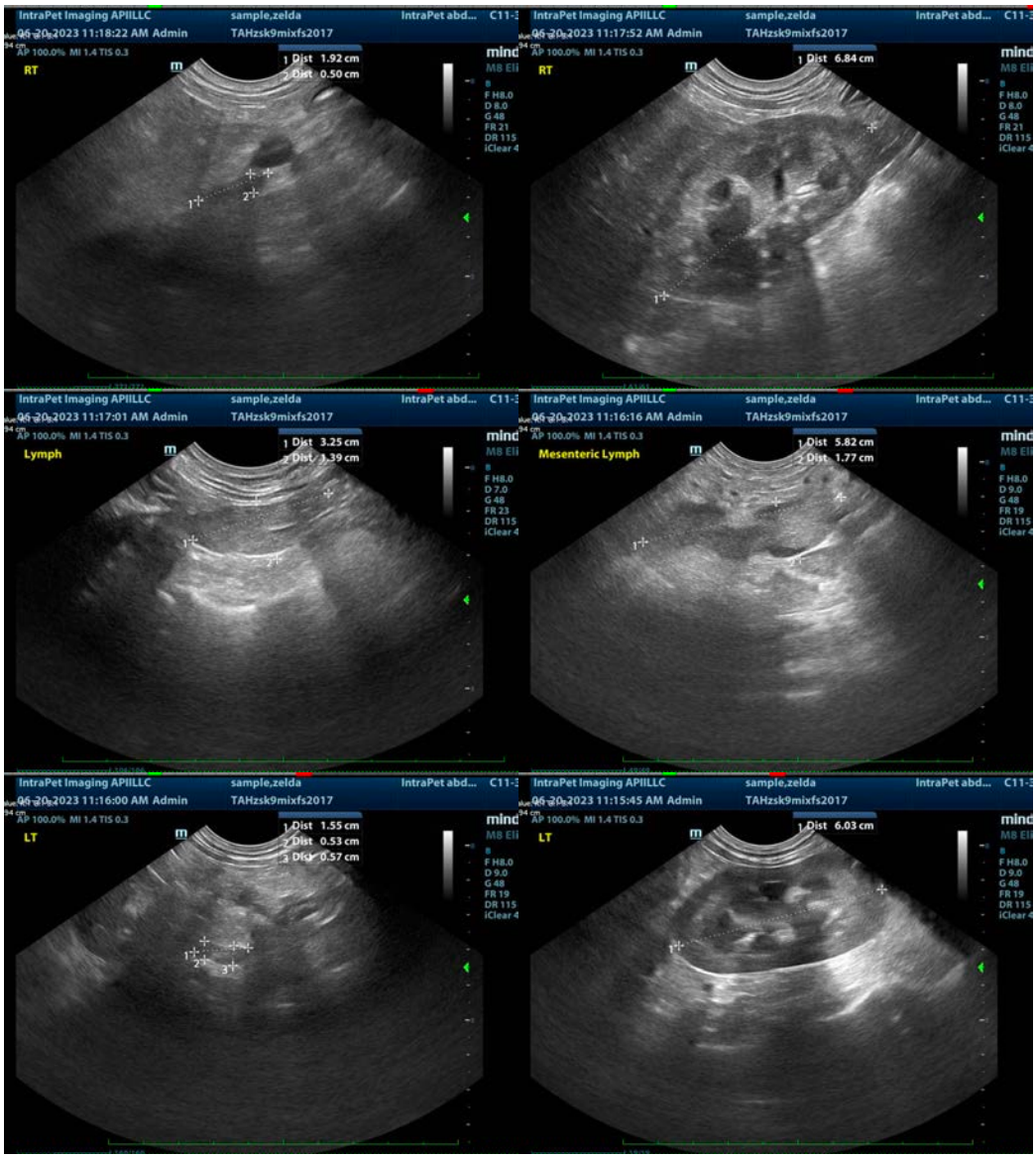
- **Hyperechoic hepatomegaly -** This appearance is non-specific and most consistent with a benign steroid (endocrine) or vacuolar hepatopathy or reactive or idiopathic hepatopathy. Inflammatory and/or infiltrative disease (such as round cell neoplasia) are also possible, but considered less likely.

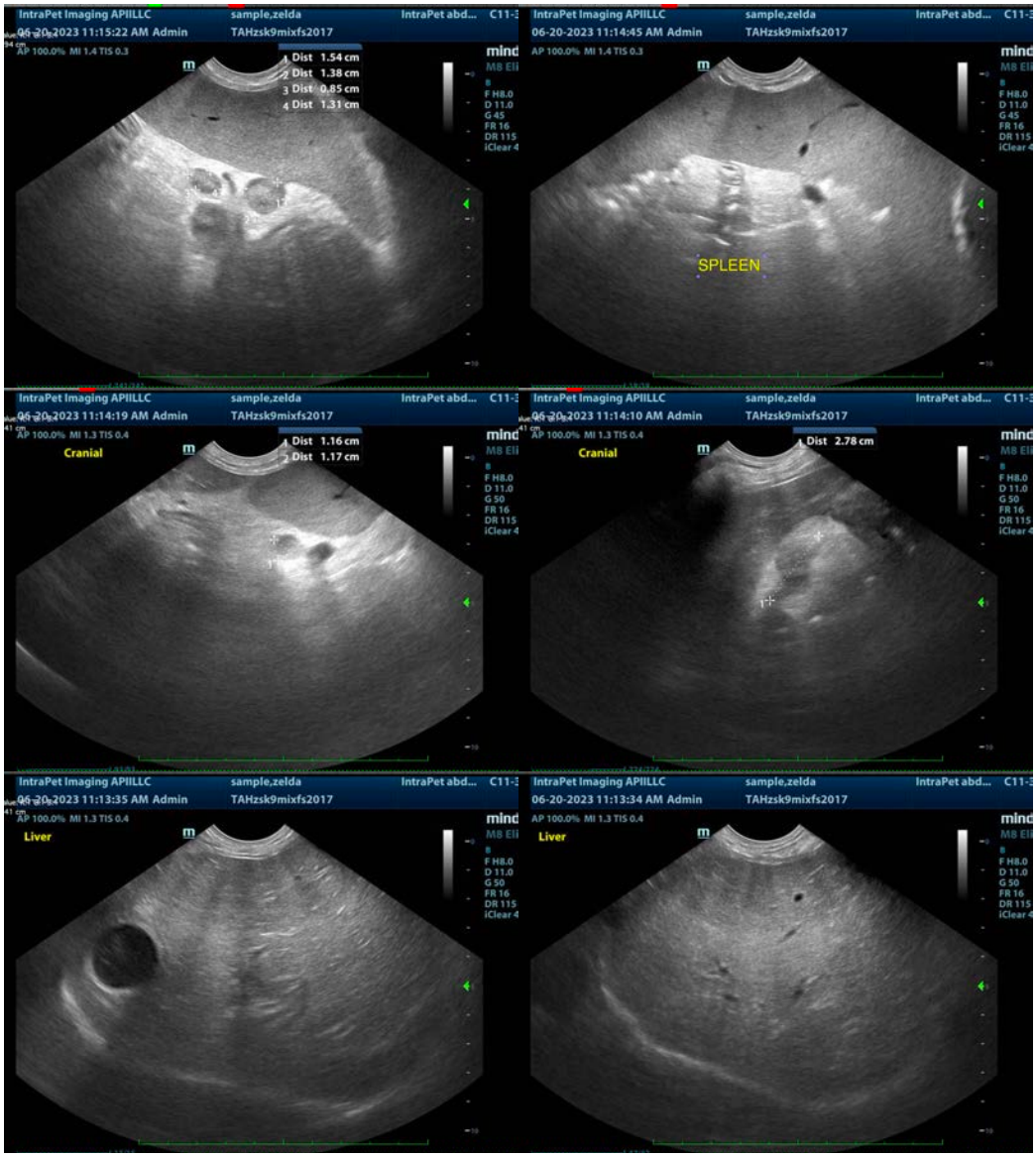
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

This patient's diffuse lymphadenopathy and organomegaly is concerning for infiltrative round cell neoplasia such as lymphoma. However, benign inflammatory disease cannot be ruled out without tissue sampling. Therefore, recommendations include a fine needle aspirate of the enlarged lymph nodes if patient's coagulation status is appropriate. Additionally, given this patient's reported laboratory changes, 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.

A urine protein to creatinine ratio is also recommended to quantify the proteinuria.

Pending results of cytology, a baseline cortisol is recommended. If baseline cortisol is less than 2, a full ACTH stimulation test is recommended to rule out hypoadrenocorticism.





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.

Beth Johnson, DVM, DACVIM
info@sonopath.com