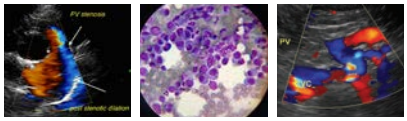
IMAGING PERFORMED BY

IntraPet.com



SonoPath

Clinical Sonography & Telecytology

EDUCATIONAL TELECONSULTATION SERVICES™

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DATE

10/19/22

PATIENT

Milo Kalen

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

3/5/15

WEIGHT

15.8 Pounds

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Stephanie Warga RDCS, RVT

HOSPITAL NAME

Charm City VH

REFERRING VET

Dr. Hansen

INVOICE

42195

PRESENTING CLINICAL SIGNS

1-2 week history of intermittent hyporexia. Vomiting x 1 day. Significant neutrophilia at last examination. Historical grade 1/6 L systolic murmur. Cranial organomegaly with mild splinting on palp, bilateral immature cataracts.

Current Medications: Lantus 4units BID, Convenia.
Lab Results: Neutrophilia 32.4k.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

Urinary bladder is adequately distended. It has a normal uniform wall thickness. Contents include primarily anechoic fluid with occasional echogenic non-shadowing debris, most consistent with incidental suspended lipid in a cat, possibly combined with exfoliated cells, mucous and/or small blood clots. Both sterile inflammation as well as urinary tract infection can also present with echogenic debris. No masses or cystoliths are observed. The trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

The kidneys are bilaterally enlarged. The left measures 6.03 cm. The right measures 6.0 cm. Multiple cortical anechoic cysts of various sizes are present in both kidneys. Overall echogenicity is increased (hyperechoic cortex) as the result of acoustic enhancement from the cysts and kidney shape is distorted. Several of the cysts appear septated and some echogenic fluid is present, consistent with complicated cysts or potentially less likely abscesses, hematomas, etc.

Adrenal Glands

The right adrenal gland is normal in size (0.60 cm), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

The left adrenal gland is normal in size (0.63 cm), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

Spleen

The spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). 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 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 is empty with no evidence of obstruction or foreign material.

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

Pancreas

The observed pancreas is prominent (enlarged) in size, hypoechoic to surrounding tissue and irregular in shape with a swollen undulating contour. Pancreatic duct dilation is noted. Enhanced hyperechoic ill-defined surrounding fat is noted.

Free Abdomen

Mesenteric lymph nodes are 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. The largest node measured 3.5 cm x 2.5 cm with a cystic/anechoic center and surrounded by enhanced mesenteric fat. A small amount of anechoic free fluid and enhanced mesenteric fat is noted in the cranial abdomen around the spleen and pancreas.

PRIMARY FINDINGS

- Acute pancreatitis with associated free fluid and enhanced mesenteric fat.
- **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 lymph nodes –** most consistent with infiltrative round cell or metastatic neoplasia. A benign aggressive inflammatory response cannot be ruled out without tissue sampling +/- culture.
- **Polycystic kidneys –** Cysts may be inherited or acquired and may be a subclinical incidental finding or the result of chronic degenerative kidney disease. This finding should be interpreted in combination with breed (inherited polycystic renal disease is more common in some breeds including, but not limited to, Persian cats, cairn terriers and bull terriers), laboratory findings and clinical signs. Complicated cysts versus abscesses, hematomas, etc. cannot be definitively ruled out. Infiltrative neoplasia is possible but considered much less likely.
- **Hyperechoic hepatomegaly** – This appearance is most consistent with benign hepatic lipidosis. Infiltrative disease such as amyloidosis or round cell neoplasia, such as mast cell tumor or less likely, lymphoma, is also possible.

SECONDARY FINDINGS

- Urinary bladder debris

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

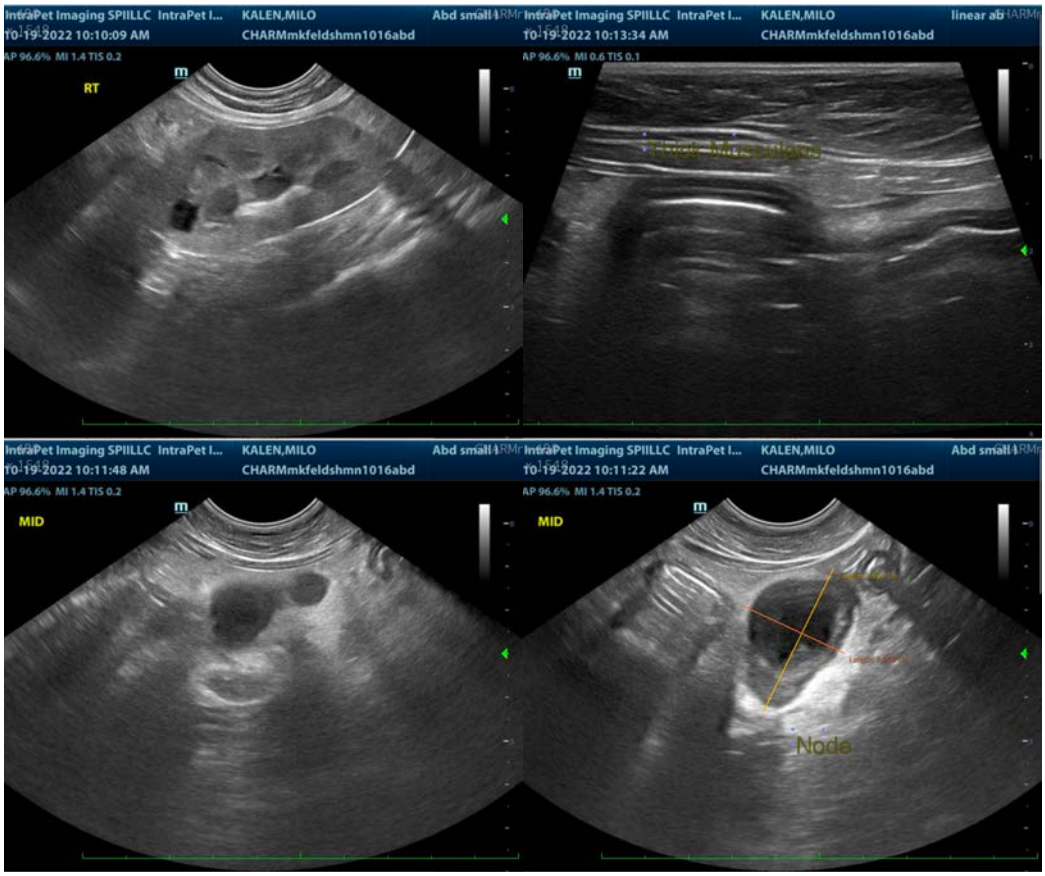
Urinalysis and, if indicated based on urinalysis results, urine culture are recommended. If protein is present in an otherwise quiet sediment, protein quantification with a urine protein to creatinine ration is recommended.

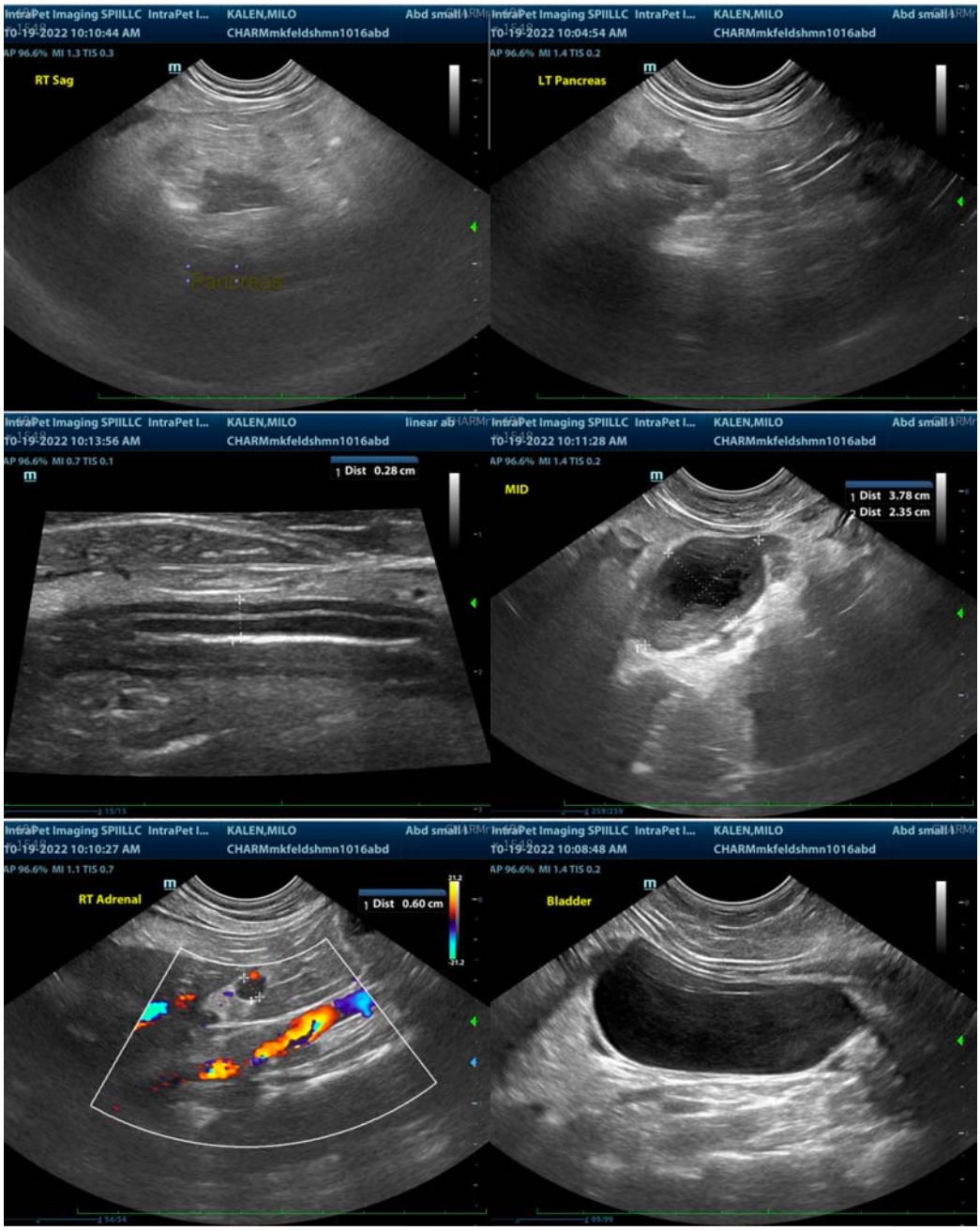
A gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory is recommended for further evaluation of GI and pancreatic function.

A fine needle aspirate of the enlarged cavitated mesenteric lymph node is recommended if patient's coagulation status is appropriate.

In the meantime, medical management of acute pancreatitis with antiemetics, gastroprotectants, appetite stimulants, or nutritional support up to and including a feeding tube if necessary, pain management, broad-spectrum antibiotics, and fluid therapy, etc. is recommended.

If a cytologic diagnosis of lymphoma is not obtained from the lymph node aspirate, then ideally biopsies of the GI tract, being sure to include ileum, if possible, and/or biopsy of the lymph node may be necessary to definitively diagnose and therefore manage the suspected infiltrative bowel disease.




IntraPet Imaging SPIILLC IntraPet I... KALEN,MILO Abd small
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RT Sag
Pancreas
IntraPet Imaging SPIILLC IntraPet I... KALEN,MILO Abd small
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MID
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2 Dist 2.35 cm
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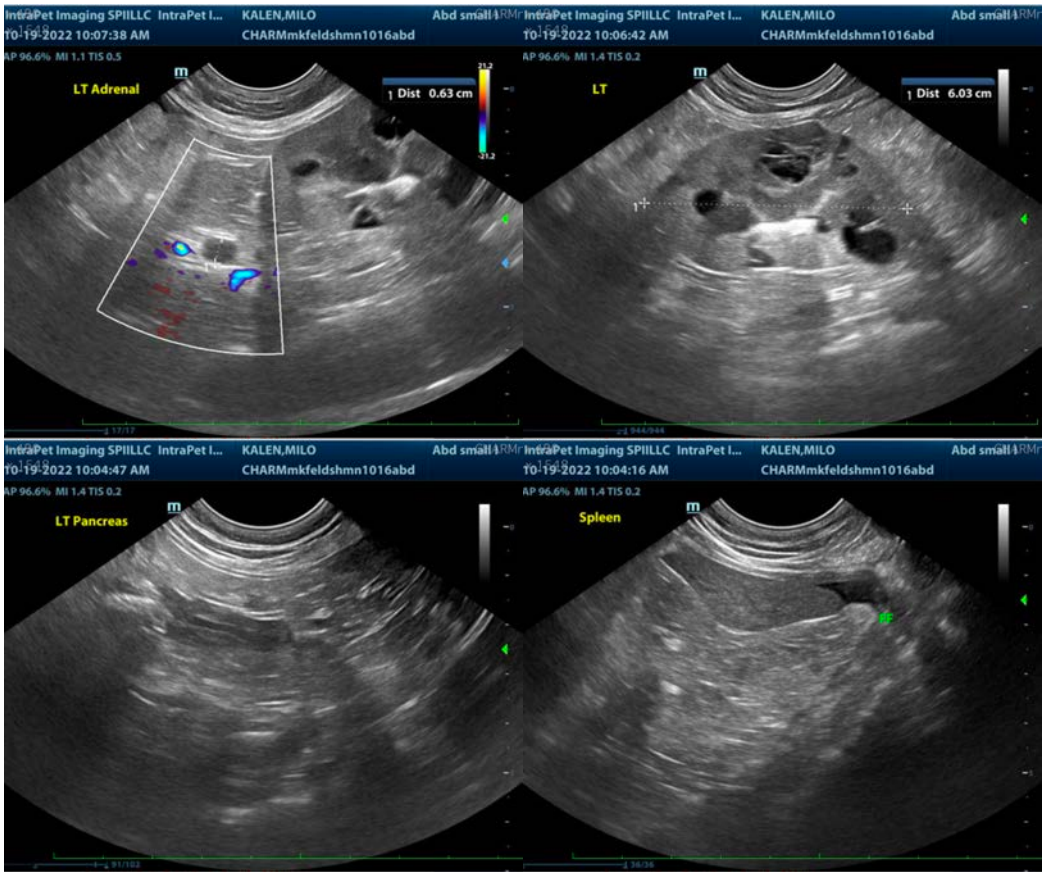
Bladder



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
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