



DATE	PRESENTING CLINICAL SIGNS
3/30/23	Pet was diagnosed with chronic lymphocytic leukemia and treatment was started 4/2022 when pets WBC reached 70.9 (5.05-16.76) with Lymphs at 63.66 (1.05-5.10) and mild anemia with HCT at 35.9. Pet was started on Chlorambucil and pred and has responded well. Current counts show significant improvement. Pet also has a history of urinary calculi. Pet developed diarrhea about 6 weeks after starting meds and was diagnosed with giardia. Subsequent fecal tests have been negative, but pet continues to have intermittent diarrhea. Diarrhea responds to metronidazole and proviable and skipping of chlorambucil dose or two.
PATIENT	
Culpeper Kiefe	
SPECIES	Current Medications: Chlorambucil 3mg q 48 hours x 1 year, Prednisone 5mg EOD (dose decreased to EOD 1 month ago), Citravet once daily for years, Dasuquin daily, Fish oil daily, heartgard and Advantix, Metronidazole PRN, Provable PRN.
Canine	Lab Results: Mild lymphocytosis 8892 (690-4500) and ALT 127 (12-118)-elevation on bloodwork but overall improvement in lymph count with treatment.
BREED	Date of Previous IntraPet Ultrasound: No previous.
Corgi	Sedation: Not required to complete full diagnostic ultrasound.
SEX	Stat Report: Not requested.
Neutered Male	Imaging Performed By: Andi Parkinson, BS, RDMS.
AGE	ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN
3/26/10	Urinary System
WEIGHT	The urinary bladder is moderately distended with anechoic contents. No masses or inflammatory changes. A 0.50 cm cystolith is noted along the dependent bladder wall. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.
34.9 Pounds	The right kidney is normal in size (5.95 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.
INTERPRETED BY	The left kidney is normal in size (5.81 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.
Beth Johnson, DVM DACVIM	Adrenal Glands
HOSPITAL NAME	The right adrenal gland is normal in size (2.12 cm long x 0.66 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.
Fullerton AH	The left adrenal gland is normal in size (2.35 cm long x 0.61 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.
REFERRING VET	Spleen
Dr. Unger	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). Multifocal well-demarcated hyperechoic homogenous nodules are noted. Additionally, several non-capsule disrupting less than 1.0 cm in size hypoechoic splenic nodules are noted. Splenic vasculature appears normal.
INVOICE	Liver
46308	The liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in

echotexture. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is moderately distended with anechoic bile as well as mild suspended and gravity dependent echogenic debris. The wall is smooth without visible thickening. There is no evidence of cystic or CBD dilation. There is no evidence of effusion or inflammation.

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 no evidence of free peritoneal effusion noted in these images.

There is no apparent lymphadenopathy noted in these images.

There is no evidence of heart base or pericardial pathology noted in these images at this time. If cardiac function evaluation is desired a full echocardiogram is recommended.

PRIMARY FINDINGS

- **Hyperechoic splenic nodules** – most consistent with benign myelolipomas. Other differentials such as fibrosis or calcification caused by old hematomas or infarcts, chronic inflammation, granulomatous disease or metastatic disease cannot be ruled out, but are considered less likely.
- **Hypo to anechoic splenic nodules** – likely represent benign lesions such as cyst, hematoma, nodular hyperplasia, extramedullary hematopoiesis, etc., however while considered less likely, infiltrative neoplasia can mimic benign lesions, and cannot be ruled out.
- **Mild gallbladder debris** - Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness. Cholecystic debris is not necessarily related to hepatobiliary disease. Echogenic bile is most commonly an incidental finding in dogs and should be interpreted in combination with clinical signs such as nausea, inappetence, cranial abdominal discomfort and/or laboratory changes such as increased ALP and/or increased Tbili.

SECONDARY FINDINGS

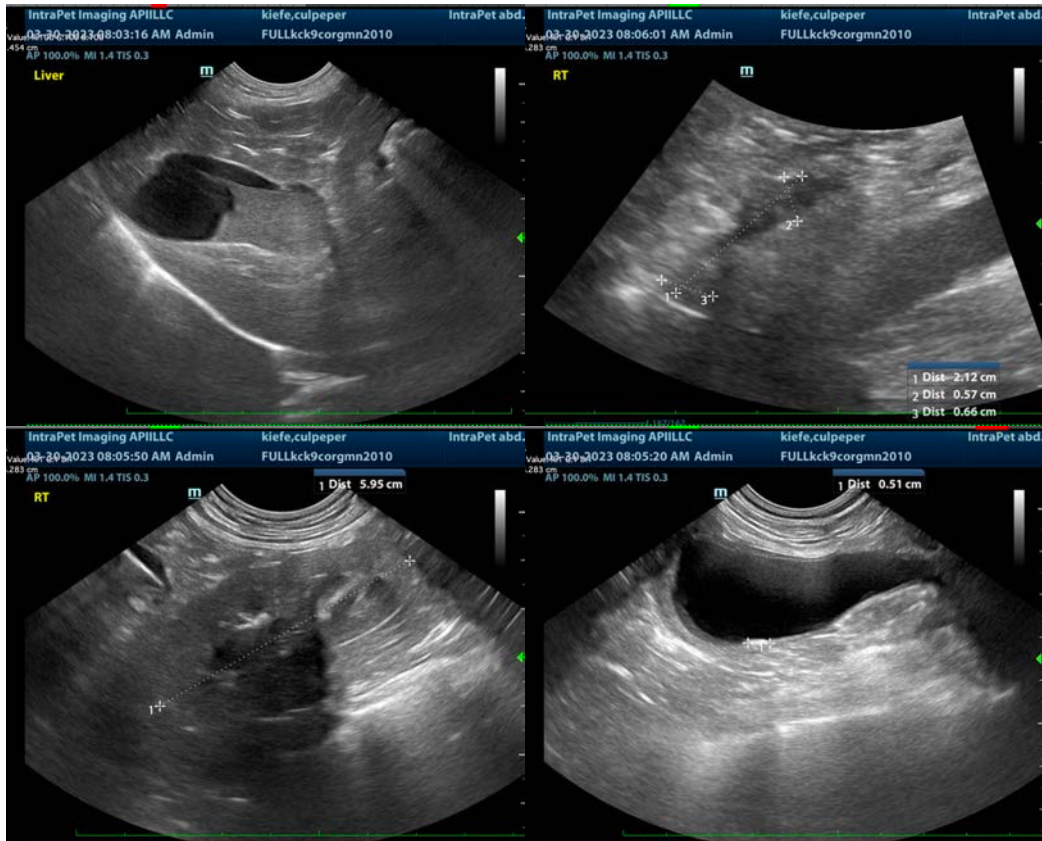
- Small 0.50 cm bladder cystolith

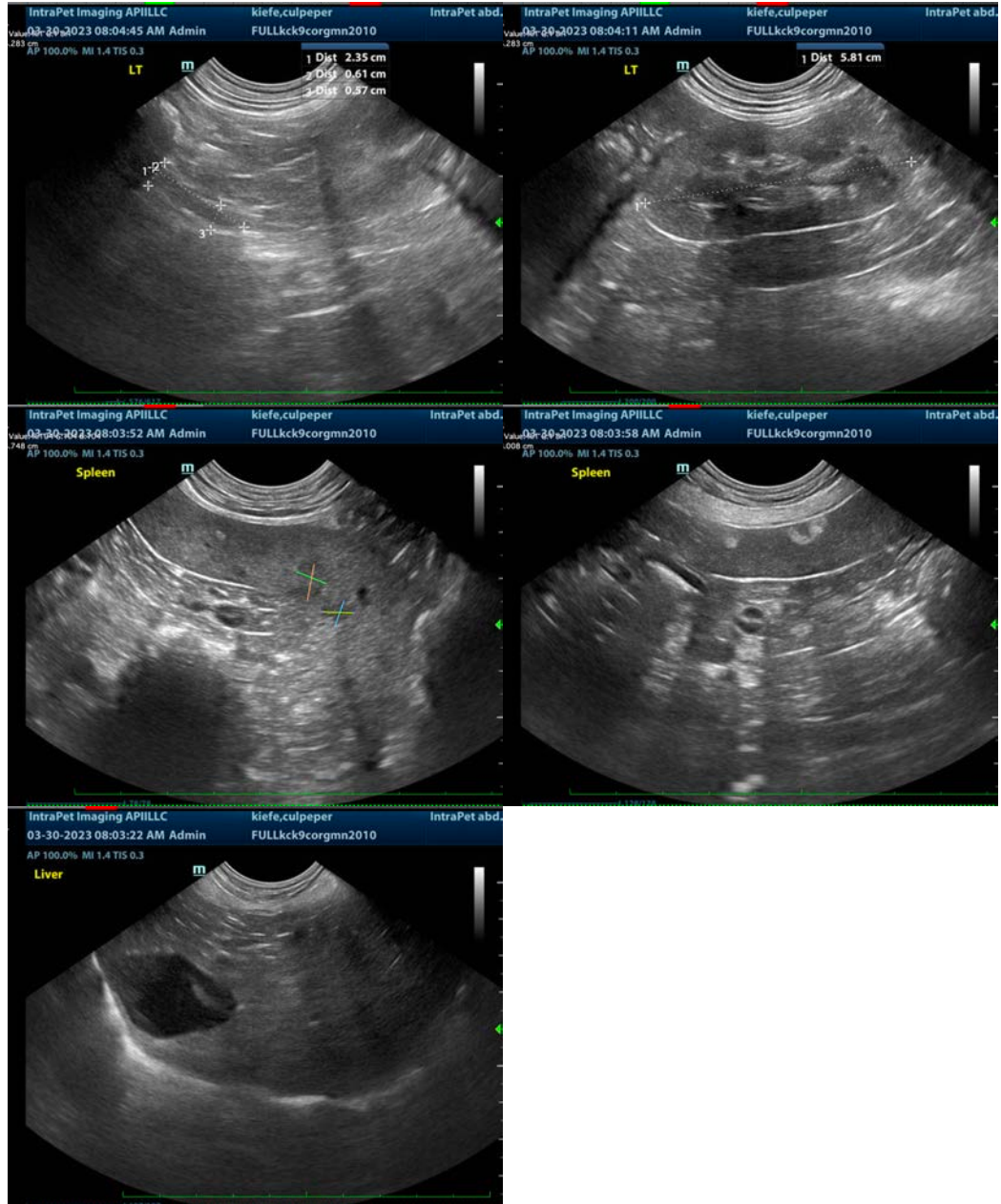
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Further evaluation of possible underlying gastrointestinal disease/maldigestive/malabsorptive conditions, etc. is recommended via a gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory as well as a fecal enteropathogen PCR panel to Texas A&M GI Laboratory.

**Recommendations are to contact the lab regarding their advised time off of antibiotics prior to submitting a stool sample.

In the meantime, if this patient requires long-term immunosuppression, it may be necessary to continue long-term probiotics such as Visbiome or Provable, or, if the diarrhea is antibiotics responsive, an underlying bacterial problem may be diagnosed from the PCR panel, which would result in a longer recommended course of antibiotics, such as a 6-8 week course of Tylosin, at which time the problem may resolve without needing continued intermittent use. However, it may not, given the need for immunosuppression, but long-term Tylosin is considered ultimately safer than long-term Metronidazole.





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
Beth.Johnson@sonopath.com