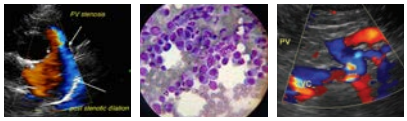
IMAGING PERFORMED BY

IntraPet.com



SonoPath

Clinical Sonography & Telecytology

EDUCATIONAL TELECONSULTATION SERVICES™

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

DATE

10/18/22

PATIENT

Gracie Pie

SPECIES

Canine

BREED

Collie X

SEX

Spayed Female

AGE

3/9/15

WEIGHT

78.3 Pounds

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Andi Parkinson RDMS

HOSPITAL NAME

Timonium AH

REFERRING VET

Dr. Montessi

INVOICE

42141

PRESENTING CLINICAL SIGNS

Hx of IMHA, ITP prev. managed with prednisolone 2mg/kg/day but recently anemia worsened without dropping steroid dose and new renal and liver enzyme elevations. PE: Subjectively distended abdomen- AFAST neg for free fluid. Focal plaque on L lateral peripheral tongue margin- unknown etiology

Current Medications: Prednisolone 30mg BID 4mo duration
Lab Results: RBC 3.93 (5.39-8.70), HCT 30.4 (>38.6), MCV 77 H, MCH 27.2 H, WBCs 22.7- neut. 19.9k, Bands 454 (0-170); PLT "adequate"
ALT 545 (18-121), AST 83 (16-55), ALP 9257 (5-160), GGT 177 (0-13), TBili 0.1, TT4 0.6 Phos 6.8 (<6.1), USG 1.023, pH 7.0, RBCs 10-15/HPF, WBCs 2-5/HPF), rod and cocci bacturia
Date of Previous IntraPet Ultrasound: 6/14/22. See attached.
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 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 right kidney is normal in size (7.81 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.

The left kidney is normal in size (7.46 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

Adrenal glands are small (flattened contour). The left adrenal gland measures 2.8 cm long x 0.61 cm at the cranial pole and 0.73 cm at the caudal pole. The right adrenal gland measures 2.26 cm long x 0.41 cm at the cranial pole and 0.46 cm at the caudal pole. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

Spleen

Spleen is largely normal in appearance (shape, echotexture and echogenicity); however, it is volume contracted. Hydration status assessment is recommended.

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.

Gallbladder is moderately distended with anechoic bile as well as suspended and gravity dependent echogenic debris. A “porcelain” gallbladder wall is present, characterized by mineral densities adhered to the internal lining of the gallbladder. No evidence of nodules, masses, or obstruction. There is no evidence of cystic or CBD dilation. There is no evidence of effusion or inflammation.

Gastrointestinal

The visible stomach wall is normal in thickness and layering. The lumen of the stomach is mildly distended with echogenic non-shadowing luminal contents and gas consistent with normal ingesta. There is 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. Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is mildly distended with echogenic non-shadowing luminal contents and gas consistent with normal ingesta. There is 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.

PRIMARY FINDINGS

- **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.

- **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. The appearance of the gallbladder wall is likely an incidental finding and/or indicative of chronic cholecystitis, etc. This finding should be interpreted in combination with laboratory changes and/or physical exam findings such as cranial abdominal pain to further interpret pathology.

SECONDARY FINDINGS

- **Flat adrenal glands** – consistent with chronic steroid administration.

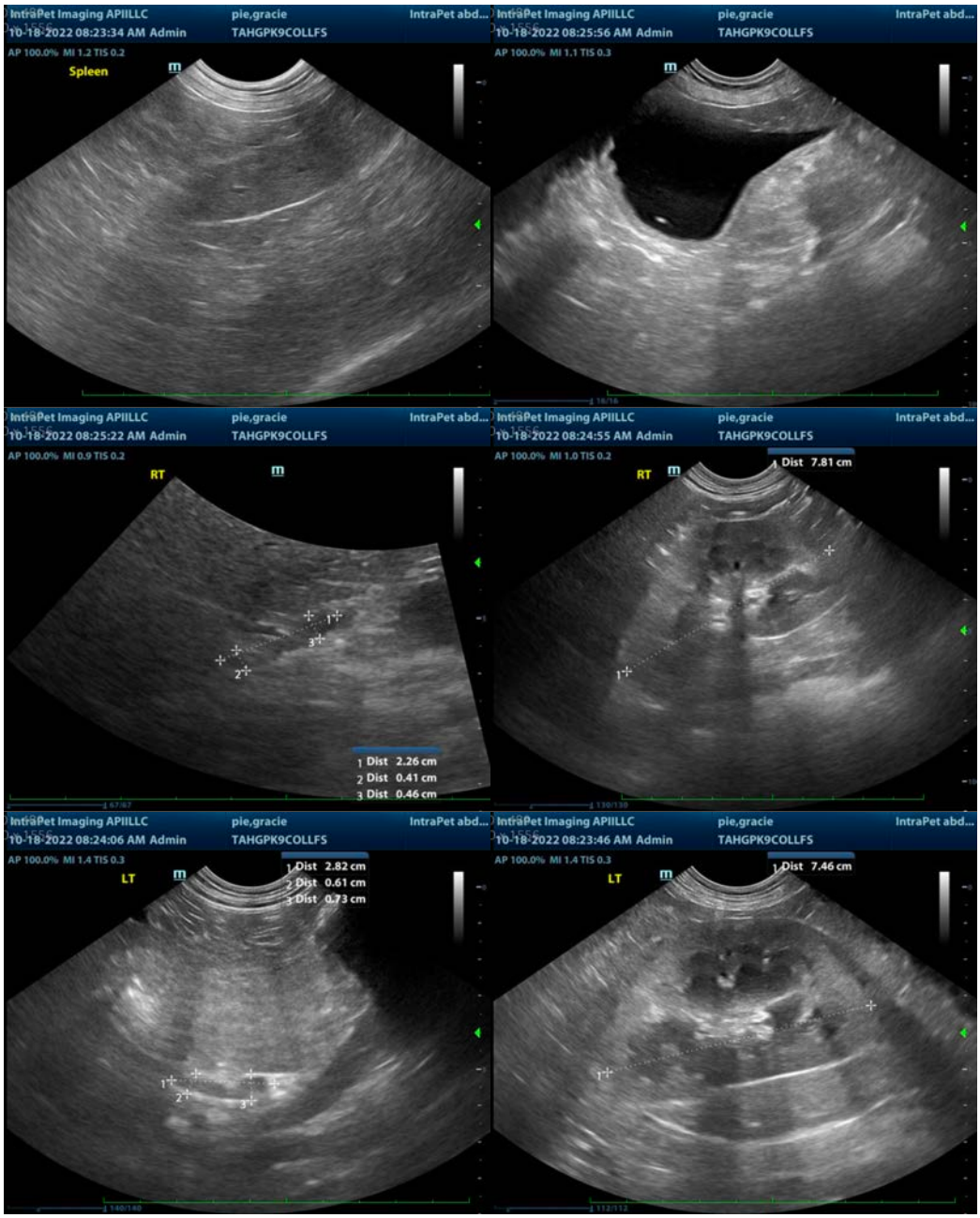
- Urinary bladder debris

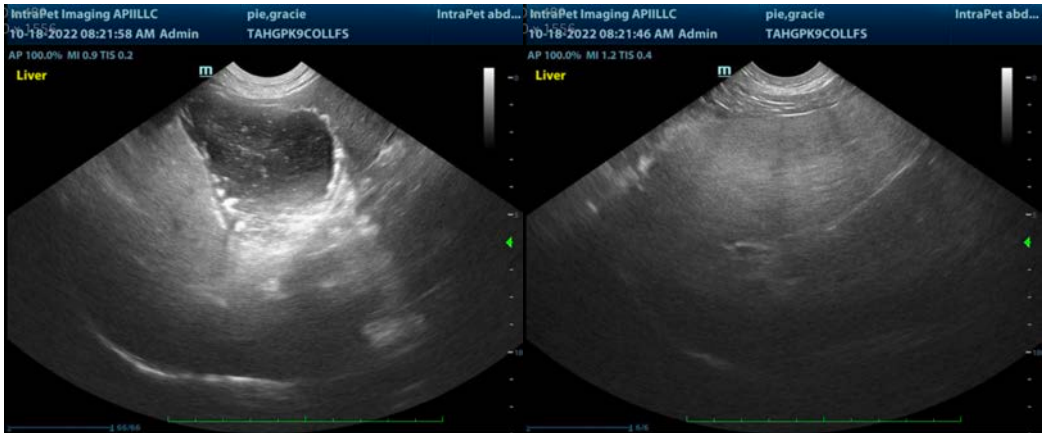
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Given this patient's acute change in blood chemistry values, testing for Leptospirosis is warranted if not recently evaluated.

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.

This patient's laboratory changes, ultrasound findings, etc. are all likely secondary to chronic high dose steroid administration. Therefore, recommendations are to slowly taper the Prednisone dose as tolerated to the lowest effective disease, and potentially even discontinue it if the patient goes into remission and maintains normal cell counts through the taper. If chronic immunosuppression is required to maintain normal cell counts, then the addition of a second immunosuppressive medication at this time is recommended to allow tapering and potential discontinuation of the steroids.





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