

IMAGING PERFORMED BY

IntraPet.com



**SonoPath**

Clinical Sonography & Telecytology

EDUCATIONAL TELECONSULTATION SERVICES™

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

**DATE PRESENTING CLINICAL SIGNS**

7/20/22 7 month history of urinary accidents, per owner pet urinates in the house but doesn't outside, evidence of illio-psoas major pain, evidence of decreased appetite for about the same duration, weight loss. Was diagnosed to have partial ACL L stifle 4-5 months ago

**PATIENT**

Alexa Rosenberger Current Medications: Apoquel 16mg - 1/2 tab SID and Apoquel 5.4mg - 1/2 tab SID, Gabapentin 600mg - 1/2 tab PRN

**SPECIES**

Canine

Lab Results: See attached.  
Date of Previous IntraPet Ultrasound: No previous.  
Sedation: Dexdomitor IV.  
Stat Report: Not requested.

**BREED**

Shepherd X

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**SEX**

Spayed Female

**Urinary System**

The urinary bladder is only mildly (not at full repletion) 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.

**AGE**

6/26/20

The right kidney is normal in size (6.19 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. A hyperechoic band parallel to the corticomedullary border is present.

**WEIGHT**

55.5 Pounds

The left kidney is normal in size (5.83 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. A hyperechoic band parallel to the corticomedullary border is present.

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**Adrenal Glands**

The right adrenal gland is normal in size (2.48 cm long x 0.63 cm at the cranial pole and 0.56 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

**IMAGING PERFORMED BY**

Stephanie Pearce  
RDCS, RVT

The left adrenal gland is normal in size (3.0 cm long x 0.47 cm at the cranial pole and 0.49 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

**HOSPITAL NAME**

Claws N Paws AH

**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.

**REFERRING VET**

Dr. Singh

**Liver**

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.

**INVOICE**

39704

Gallbladder is moderately distended with anechoic bile as well as 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.

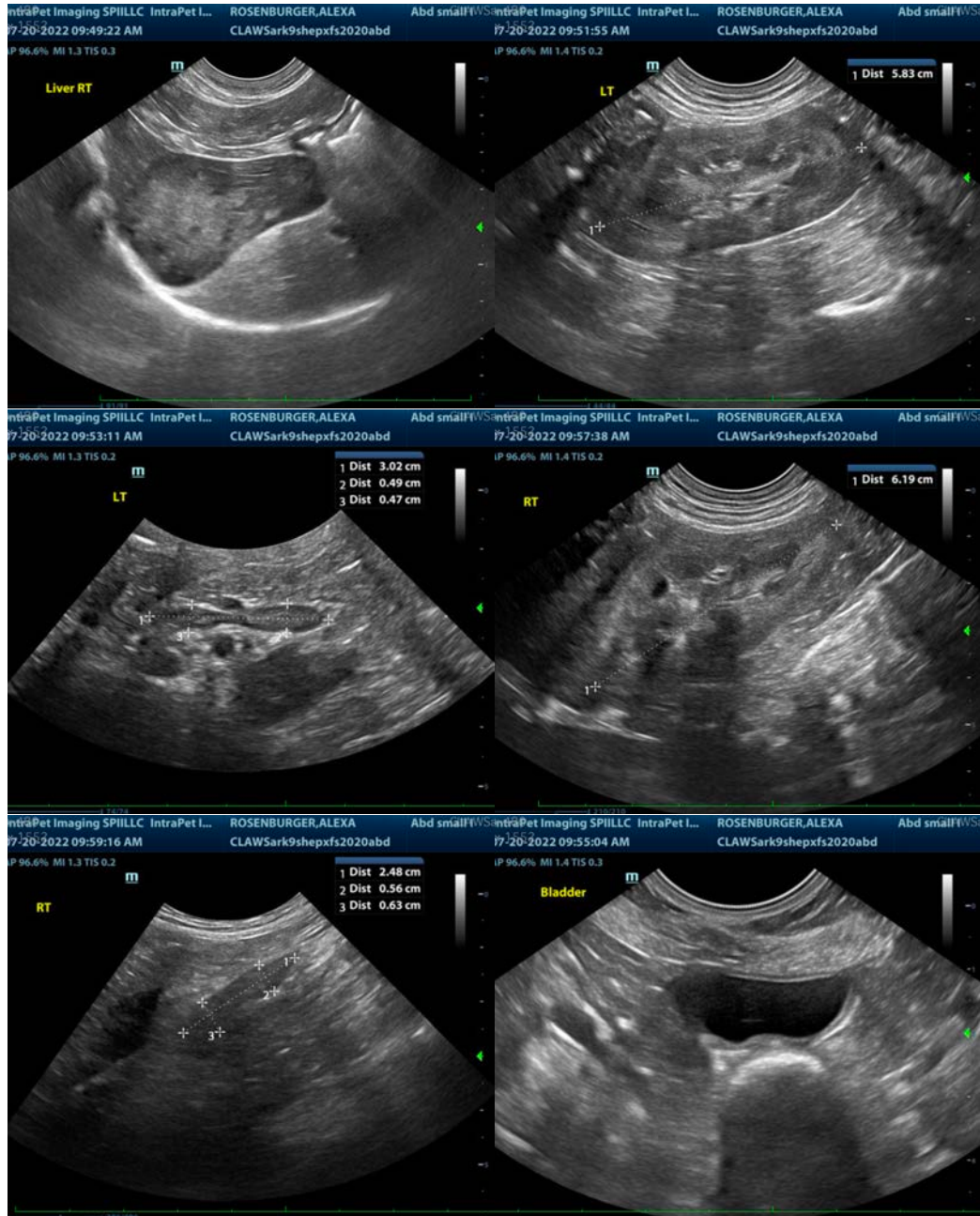
There is no apparent lymphadenopathy noted in these images.

## **ULTRASONOGRAPHIC FINDINGS**

- **Bilateral medullary rim sign** - This finding is of unknown clinical significance and can be a normal variant, often idiopathic. Medullary rim sign can be present with renal disease including FIP, lymphoma, hypercalcemic nephropathy, Leptospirosis, tubular disease, other and should be interpreted in combination with other more specific indications of kidney disease such as isosthenuria, proteinuria, azotemia, etc. This is a common incidental finding in patients with diabetes mellitus.
- **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.

## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

- Given this patient's urinary signs combined with the non-specific kidney changes seen here, CBC/chemistry panel, electrolytes, and urinalysis are recommended, if not recently evaluated for further assessment of the kidneys as well as liver enzymes, etc., given the gallbladder debris.
- Given the breed and reported complaint of weight loss, a gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory is recommended to rule out possible exocrine pancreatic insufficiency.
- Finally, if an underlying medical cause cannot be determined, further orthopedic and/or neuromuscular evaluation is recommended, given the combination of orthopedic and muscular problems described in such a young dog.



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