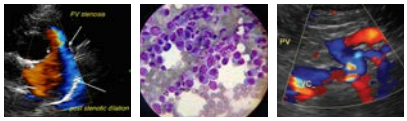
IMAGING PERFORMED BY

IntraPet.com



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com

DATE

6/16/22

PATIENT

Princess Lash

SPECIES

Canine

BREED

Shetland Sheepdog

SEX

Spayed Female

AGE

12/17/07

WEIGHT

26.7 Pounds

INTERPRETED BY

Kathleen Sennello DVM, MS, Diplomate ACVIM (Small Animal Internal Medicine)

IMAGING PERFORMED BY

Rachel Brilhart RDMS

HOSPITAL NAME

Bayside AMC

REFERRING VET

Dr. Sims

INVOICE

38788

PRESENTING CLINICAL SIGNS

Patient presented for decreased appetite and lethargy. Bloodwork revealed elevated GGT and ALK Phos (both mild). The serum was icteric. Mild elevation in BUN--we do not have urinalysis.

Current Medications: Denamarin, Entyce.
Lab Results: Attached.
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

The urinary bladder is moderately distended with anechoic urine. The Bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi. There is a small anechoic, rounded structure visualized near the ventral aspect of the trigone/cystourethral junction. This could be a cystic lesion adjacent to the urinary bladder, or could be a diverticulum arising from the bladder wall. There is no mass lesion in this area, or calculi, and no inflammation surrounding the lesion. This anechoic, rounded area measures 0.45 cm x 0.55 cm.

The left kidney has a normal shape and size (4.54 cm) with pinpoint non-obstructive nephroliths. Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal. A large cortical cyst is visualized at 1.55 cm.

The right kidney has a normal shape and size (4.48 cm) with pinpoint non-obstructive nephroliths, one measuring at 0.28 cm. Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.65 cm at the caudal pole. It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

The right adrenal gland is normal/borderline large in size measuring 1.01 cm at the caudal pole. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is slightly irregular, but there is no evidence of a mass effect.

Spleen

The spleen is subjectively normal in size and the echotexture is homogenous. The splenic capsule is smooth with no visible irregularities. Rare discrete focal hyperechoic, perivascular parenchymal abnormalities are present. The appearance of these lesions is most consistent with benign splenic myelolipomas. The blood flow through the hilus and splenic parenchyma appears normal.

Liver

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed.

The gall bladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. There is a moderate amount of non-organized echogenic debris. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.7cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layers is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

The visualized areas of duodenum, jejunum and ileum have a relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. Small intestinal wall measures 0.32 cm. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Sections of colon are visualized with formed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

Pancreas

The pancreas is prominent and mottled compared to the surrounding isoechoic mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

Free Abdomen

Evaluation of the peritoneal cavity did not reveal any evidence of effusion. There is no significant lymphadenopathy. A lymph node near the colon is visualized measuring 0.66 cm. The omentum is of normal echogenicity.

PRIMARY FINDINGS

- Cystic anechoic structure adjacent to the urinary bladder wall, which could be consistent with a cyst or a diverticulum-like structure. Recommend continued monitoring and urinalysis and culture.

- Heterogeneous liver – The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy.

SECONDARY FINDINGS

- Prominent, mottled pancreas – The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.

- Moderate gallbladder debris – The gallbladder does not appear significantly distended, but there is debris adhered to the gallbladder wall and possible mild proximal bile duct dilation.

- Slightly irregular, borderline large right adrenal gland – The significance of this is unclear, as I would not call it an adrenal mass (at this time). Recommend continued monitoring and blood pressure evaluation.

- Large cyst in the left kidney – likely an incidental finding.

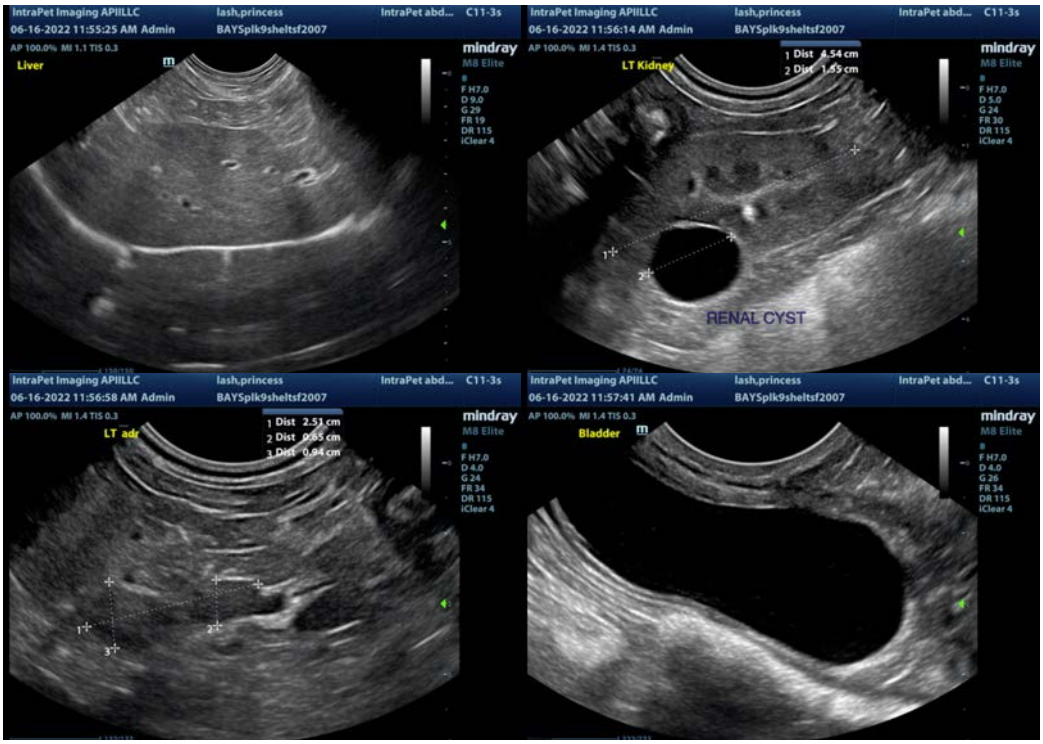
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

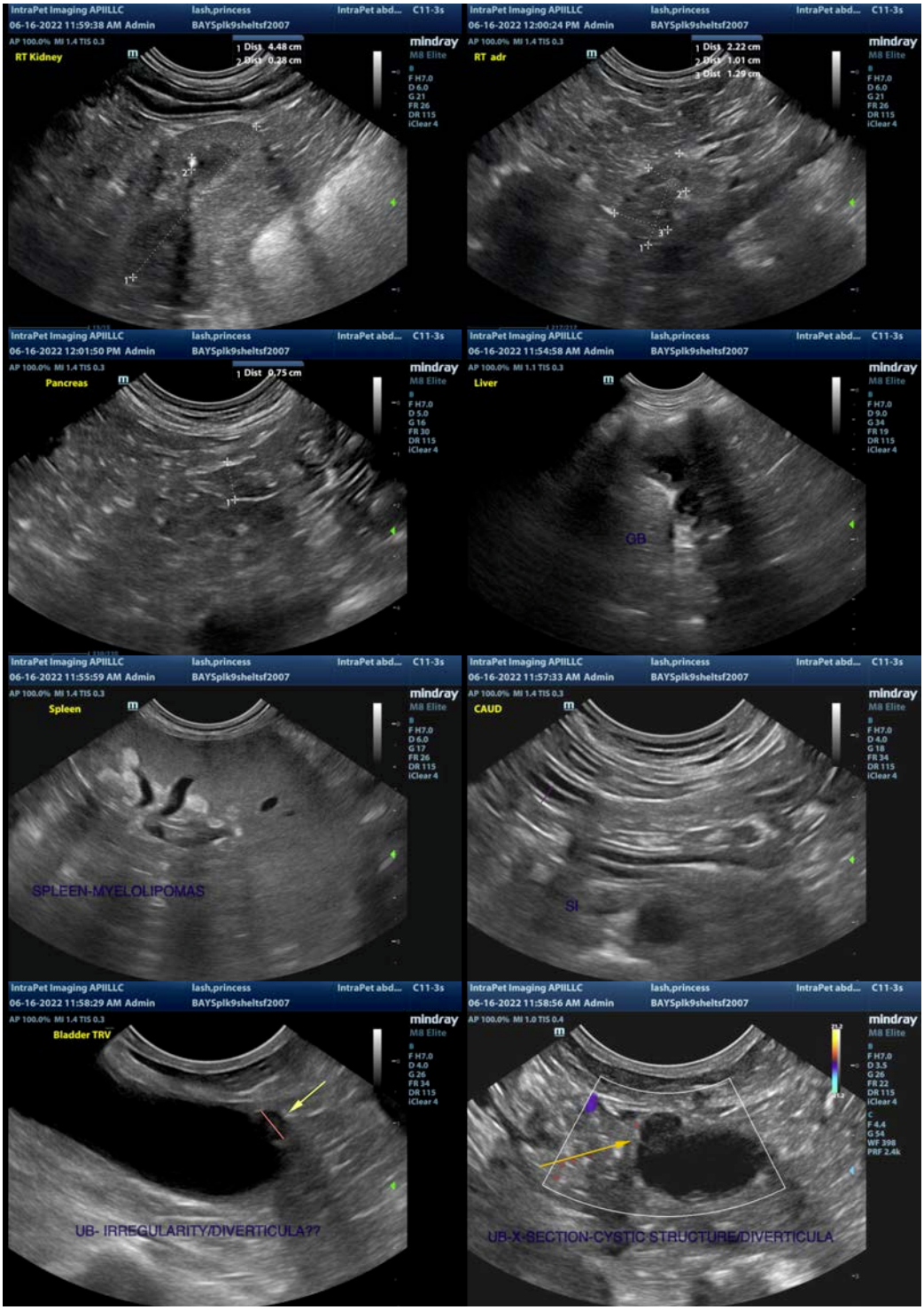
An obvious cause for the anorexia and lethargy is not clearly observed. The liver does appear somewhat heterogeneous, which can be a common non-specific finding in older dogs. Additionally, the gallbladder has some adherent debris, but does not appear significantly inflamed or distended. Given the breed, gallbladder disease is always a concern, and it is unclear if the bilirubin is elevated. If the liver enzyme elevations are concerning, and the icterus is real, then I would consider starting Ursodiol and a course of antibiotics, and reevaluating the gallbladder with ultrasound in 7-10 days, sooner if lab work or the patient is clinically getting worse. Additionally, you could consider a fine needle aspirate of the liver.

There is an irregular, ovoid, anechoic structure visualized near the cystourethral junction. I suspect this is an incidental finding, and a diverticulum or a cystic structure laying near the urinary bladder. If there are issues with recurrent urinary tract infections, etc., you could consider a contrast cystogram to further evaluate this lesion. Recommend urinalysis and culture.

The right adrenal gland appears somewhat irregular and "plump" as compared to the left adrenal gland. It is not severely enlarged, and there is no obvious mass effect. Recommend blood pressure evaluation and continued monitoring of this adrenal gland for growth, etc., as this could represent an early neoplastic lesion (or hyperplasia).

Consider three view thoracic radiographs to rule out concurrent thoracic disease/involvement.





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.

Kathleen Sennello DVM,MS, Diplomate ACVIM (Small animal Internal Medicine)
kathleen.sennello@sonopath.com