

**DATE**

9/9/21

PRESENTING CLINICAL SIGNS

History of elevated ALKP and TBIL.

Current Medications: Denamarin was dispensed beginning of August for 1 month. June and July Fluconazole and Apoquel were dispensed for skin issue. dispensed 9/3/21 for a chronic cough pet is having:

PATIENT

Guaifenesin 100mg/Dex Hydrobromide 10mg Cough Tablet

Sophie Palewicz

Lab Results: 9/3/21-ALKP 547 [23-212]. TBIL 1.2 [0.0-0.9] ** it was indicated in the records that this sample was hemolyzed.

5/28/21-ALKP 341, TBIL 1.3. 4/26/21-ALKP 377, TBIL 1.2.

SPECIES

Date of Previous IntraPet Ultrasound: No previous

Canine

Sedation: Torbugesic IV.

Stat Report: Not requested.

BREED

Terrier

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.

SEX

Spayed Female

The left kidney has a normal shape and size (4.0 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, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

AGE

2013

WEIGHT

20 lbs

The right kidney has a normal shape and size (4.66 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, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

INTERPRETED BYKathleen Sennello
DVM, MS, Diplomate
ACVIM (Small Animal
Internal Medicine)**Adrenal Glands**

The left adrenal gland is normal in size measuring 0.58 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.

HOSPITAL NAME

Banfield White Marsh

The right adrenal gland is normal in size measuring 0.65 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 normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

REFERRING VET

Dr. Racz

Spleen

The spleen is subjectively normal in size, echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. There is a very small 0.33 cm, hyperechoic nodule visualized in the parenchyma.

INVOICE

91754

Liver

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is homogenous echotexture. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed. The gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are primarily anechoic. 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. The duodenum measured as normal (0.41 cm) and the jejunum measured as normal (0.31 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 normal and isoechoic to surrounding 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, or subjective lymphadenomegaly. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of normal uniform echogenicity.

ULTRASONOGRAPHIC FINDINGS

PRIMARY FINDINGS:

- Small, hyperechoic nodule in the spleen. This is likely an incidental finding or a benign myelolipoma. I recommend to continue monitoring.

SECONDARY FINDINGS:

- Subjective, borderline adrenal enlargement. The adrenal glands are “chunky” for a dog of this size and could be consistent with borderline enlargement. The bilateral adrenomegaly could be consistent with bilateral hyperplasia (e.g., secondary to pituitary-dependent hyperadrenocorticism), bilateral infiltrative neoplasia, inflammatory adrenal disease, other. Correlation with clinical findings is recommended

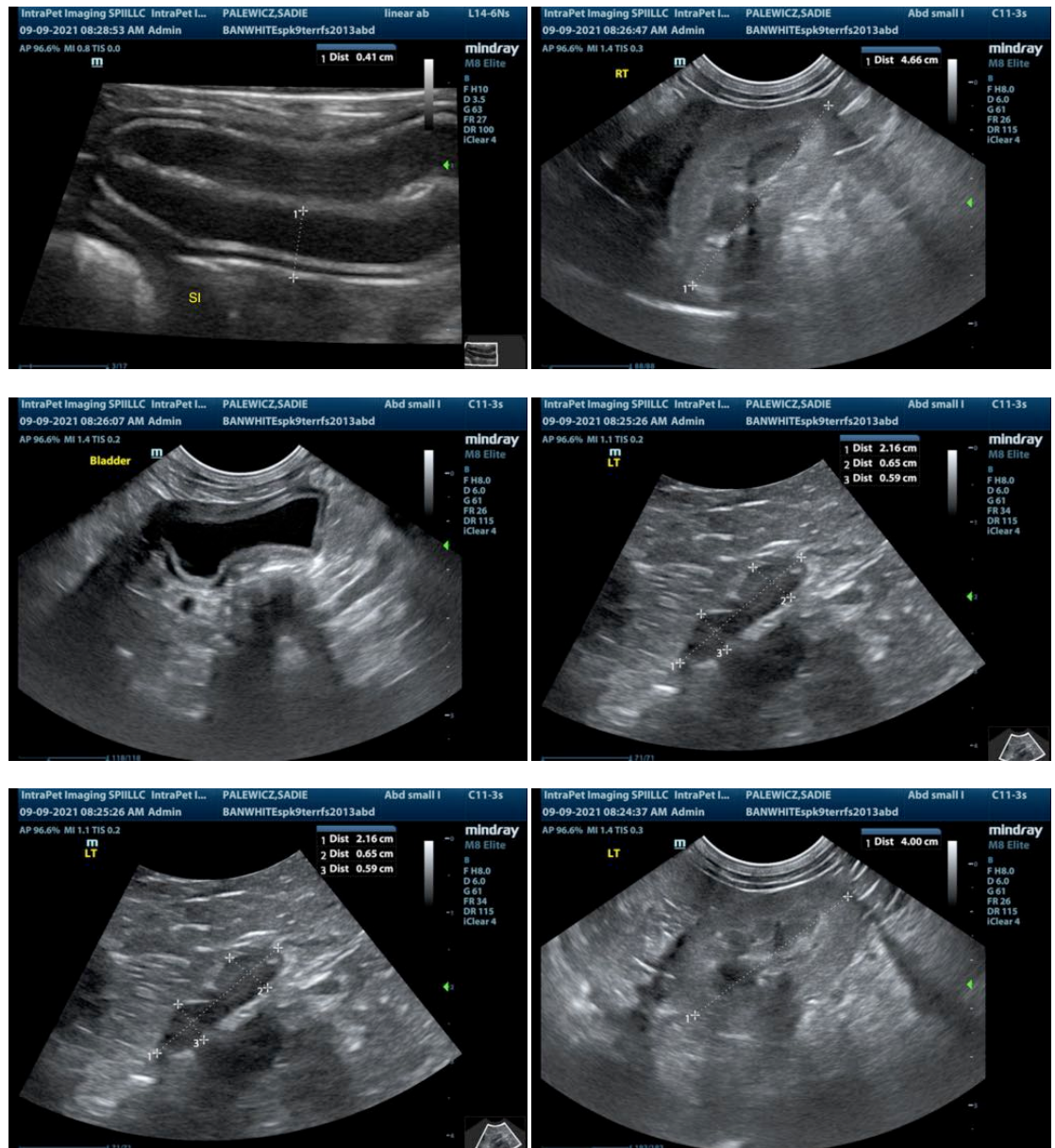
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

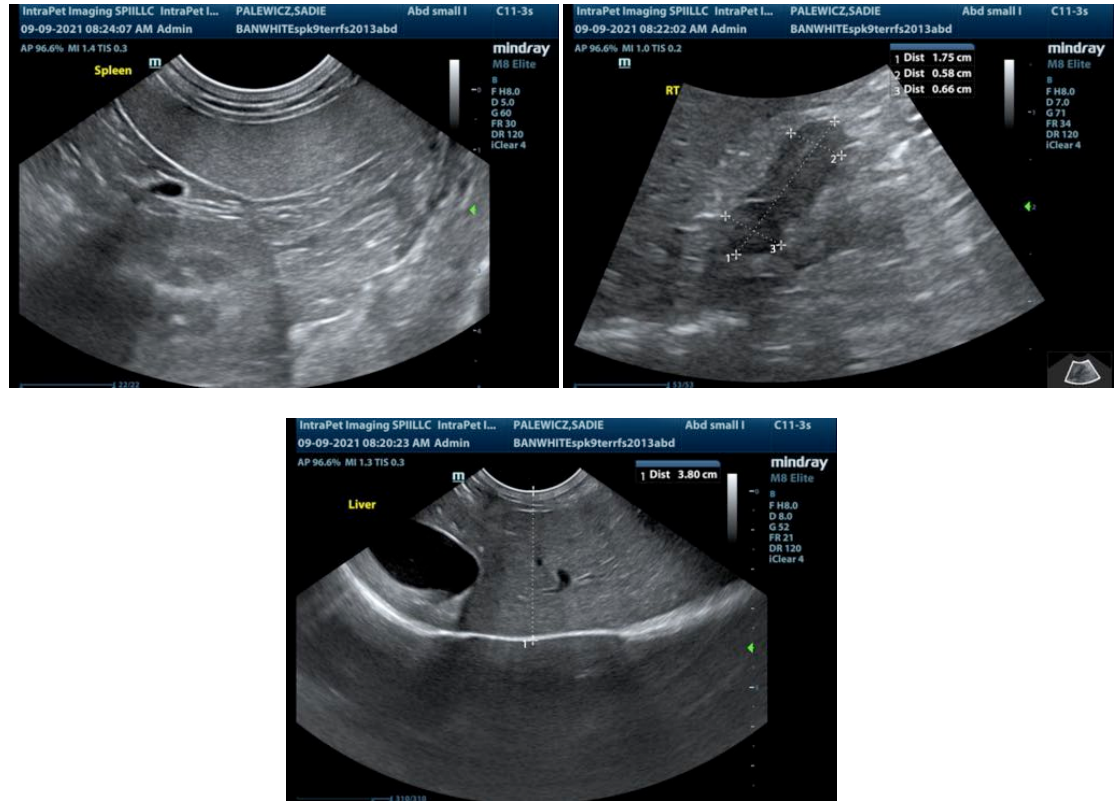
The scan was relatively normal for this dog. It is unusual to have an elevated bilirubin with such a mild ALP elevation. Additionally the ALT is reported to be normal, which is unusual. I recommend cholesterol and triglyceride levels along with evaluation of lipemia to see if the bilirubin could be artifact due to hemolysis, if it is real then it indicated liver dysfunction, which is much more serious. Also confirm that there is no evidence of anemia.

Significant liver disease can be present despite a normal ultrasound. If the elevated bilirubin is confirmed to be real then consider:

- Liver function test.
- Testing for Leptospirosis.
- FNA of the liver.

If the bilirubin is found to be artifact and the ALP is persistently elevated and there are symptoms present consistent with Cushing's disease you can consider adrenal function testing.





The information and recommendations provided are based on the images presented by the referring veterinarian. 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