

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

4/12/22 Elevated ALKP on 3/26. Weight loss.

PATIENT Current Medications: None listed.

Lila Anderson Lab Results: ALKP 541 to 995 in span of 7 months.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

SPECIES

Canine

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

BREED *Urinary System*

Husky X

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 (6.65 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

4/1/08

The right kidney has a normal shape and size (7.62 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.

WEIGHT

64 Pounds

Adrenal Glands

INTERPRETED BY

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

The left adrenal gland is large in size measuring 1.21 cm at the cranial pole, 1.1 cm at the caudal pole, and 3.35 cm in length. It is observed in its normal position cranial to the left renal artery. It is somewhat irregular in appearance in that there is a small, hyperechoic focus visualized measuring 0.28 cm in the parenchyma of the adrenal. Additionally, there is a questionable intraluminal structure within the phrenicoabdominal vein, which could represent vascular invasion. No free fluid or inflammation is visualized surrounding the adrenal gland.

IMAGING PERFORMED BY

Rachel Brilhart RDMS

The right adrenal gland is borderline large size measuring 1.0 cm at the cranial pole, 0.82 cm at the caudal pole, and 3.86 cm in length. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is somewhat irregular in appearance in that there is an isoechoic bulge in the shape of the adrenal gland in the mid body. This area measures 1.22 cm x 1.24 cm.

HOSPITAL NAME

Homeward Bound Vet

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. No focal parenchymal abnormalities are visualized.

REFERRING VET

Dr. Vance

Liver

The liver is large in size and irregular in shape. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. There is a very large mottled/cystic irregular, mildly cystic mass effect visualized on the liver measuring 11.96 cm x 9.5 cm.

INVOICE

36815

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 (between 0.3-0.5cm in wall thickness) and the jejunum measured as normal (between 0.2-0.47cm.) 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.

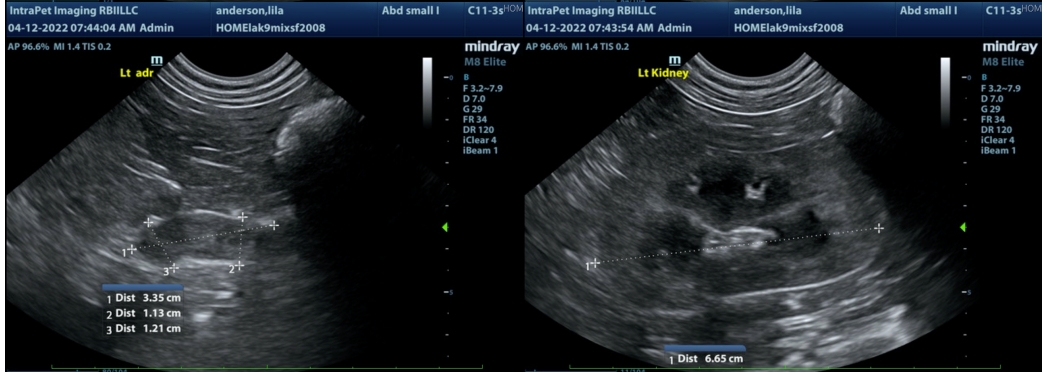
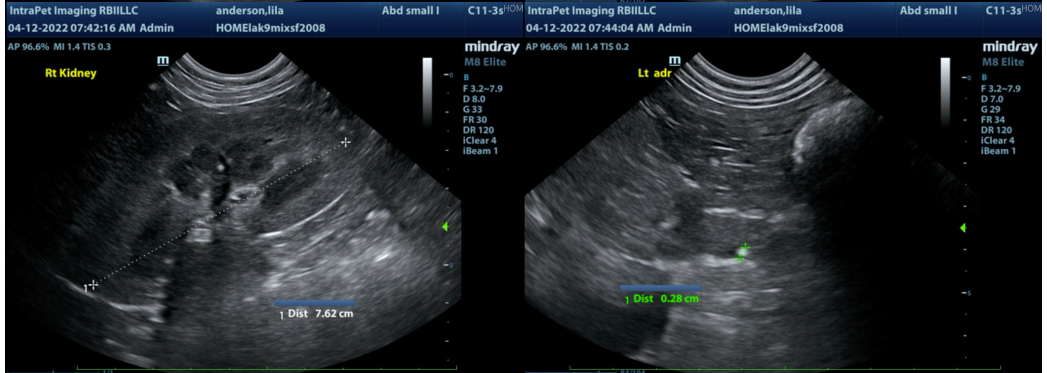
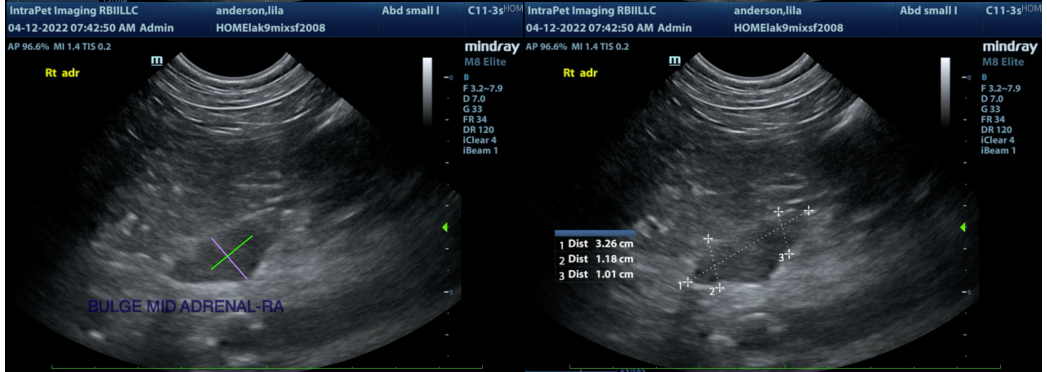
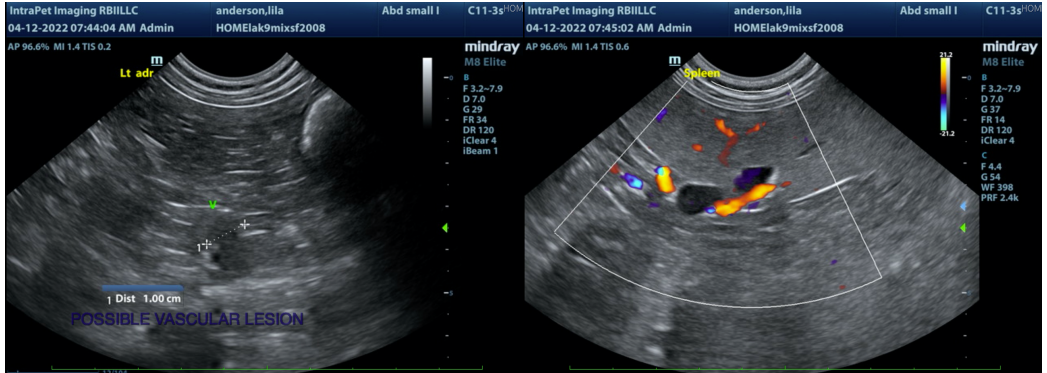
ULTRASONOGRAPHIC FINDINGS

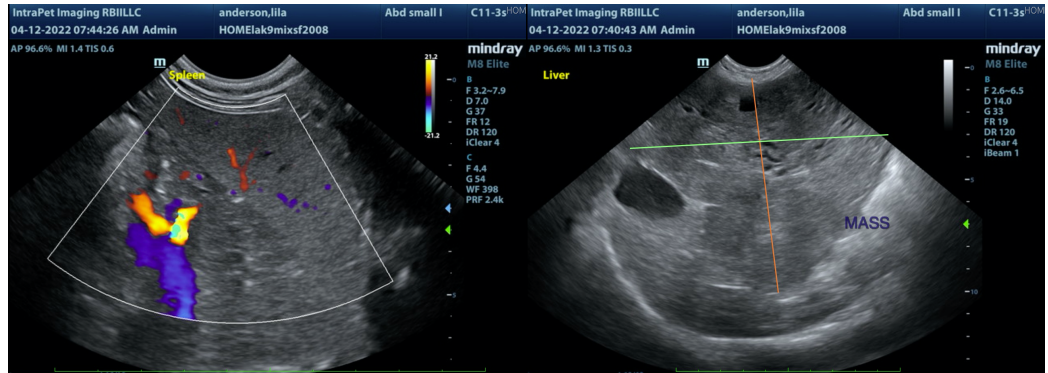
- Heterogeneous liver with very large, mixed echogenic, mildly cystic hepatic mass – most consistent with a primary hepatic mass, although other differentials are possible.
- Bilaterally large, irregular adrenals with questionable left-sided vascular invasion – The bilateral adrenomegaly could be consistent with bilateral hyperplasia (e.g., secondary to pituitary-dependent hyperadrenocorticism), bilateral infiltrative neoplasia, inflammatory adrenal disease, other. Correlation with clinical findings is recommended. Additionally, it possible to have bilateral adrenal tumors or hyperplasia concurrently with a mass effect.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There is a large mass effect on the liver. This is a likely source of the ALP elevation noted in the history. Based on the size of this lesion, a primary hepatic mass is most likely. Recommend a CT scan to further evaluate the mass effect and the surgical options available. These mass lesions can be benign or malignant, and can have a relatively favorable prognosis if surgical resection is possible.

Additionally, the adrenal glands are large and somewhat irregular in shape. The phrenicoabdominal vein on the left adrenal gland appears irregular, and there is the suspicion of possible tissue within it. This could be consistent with vascular invasion, a clot, or artifact. Recommend blood pressure evaluation. Consider adrenal function testing if signs of Cushing's are present, and recommend the aforementioned CT scan to further evaluate both adrenal glands, as these lesions could represent both benign or malignant processes.





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