

**DATE PRESENTING CLINICAL SIGNS**

4/7/23

Known roamer and typically energetic - has not been like this for the past 72 hrs Have been finding liquid where she is laying - clear and doesn't smell like urine Seems lethargic and not herself - concerned for vaginal discharge Not interested in eating - 2 night ago vomited around Not having diarrhea but has not been defecating regularly Spayed female Neighbor does not get along well with the dog and has made complaints Presented to rdvm 4/5: - Bw: Bun 44 (7-27), Crea 3 (0.5-1.8), Ca 13.3 (7.9-12), Plt 43 (148-484) - Ua: USG 1.008 - Tx: cerenia inj, SQ fluids

PATIENT

Tipsy Wysong

SPECIES

Canine

Current Medications: Protonix, Cerenia, Buprenorphine.

Lab Results: See attached.

Radiographs: Suspected splenomegaly vs fold of the spleen. Mild gas dilation of the stomach. No obvious obstruction.

BREED

Labradoodle

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

SEX

Spayed Female

Imaging Performed By: Rachel Brillhart, RDMS,

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**AGE**

4/1/16

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.

WEIGHT

28.2 Pounds

The left kidney has a normal shape and size (5.49 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

INTERPRETED BY

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

The right kidney has a normal shape and size (5.54 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

HOSPITAL NAME

Animal Emergency
Hospital

Adrenal Glands

The left adrenal gland is normal in size measuring 0.54 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.

REFERRING VET

Dr. Nacke-Horney

The right adrenal gland is normal in size measuring 0.70 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.

INVOICE

46484

Spleen

The spleen is large, 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.

Liver

The liver is subjectively normal in size, and hypoechoic 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 gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are mild and 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 area of 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. There is a diffuse moderate mesenteric lymphadenopathy with a cranial abdominal lymph node measuring 0.96 cm in diameter, lymph nodes at the mesenteric root measuring 0.73 cm and 0.58 cm in diameter, a sublumbar lymph node measuring 1.03 cm x 2.81 cm, and a cranial abdominal lymph node measuring 0.76 cm. The omentum is hyperechoic around the lymph nodes.

ULTRASONOGRAPHIC FINDINGS

- Large spleen – Differentials include infiltrative disease, congestion, anatomic variation, etc. Consider a fine needle aspirate.
- Hypoechoic, 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. The significance of this is uncertain with normal liver values.
- Moderate mesenteric lymphadenopathy – The moderate mesenteric lymphadenopathy could be concerning for a neoplastic process, although you can see significant lymphadenopathy in some cases of autoimmune/inflammatory disease, infectious disease (tick born disease-such as bartonella, fungal infections, FIP (cats)) etc. A fine needle aspirate with cytology is recommended for further evaluation.

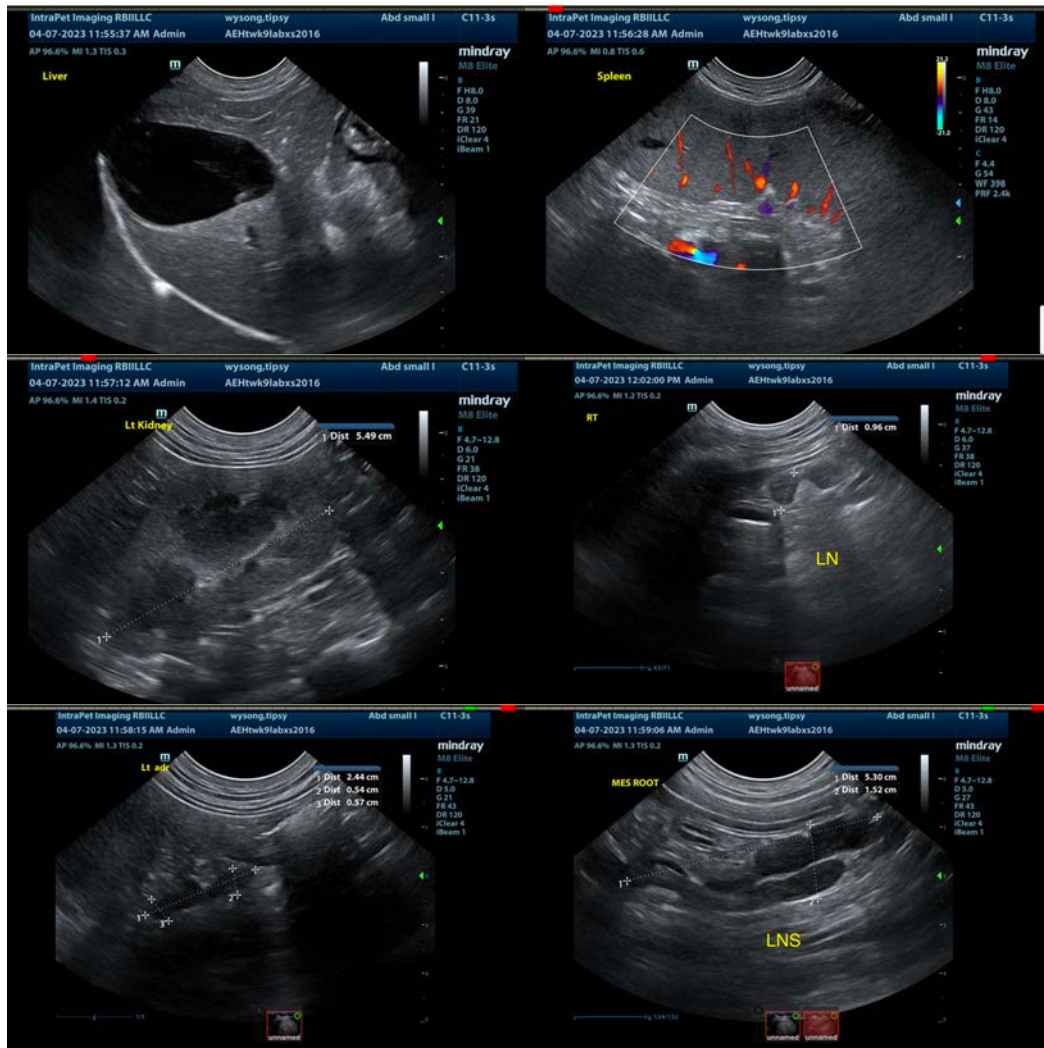
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

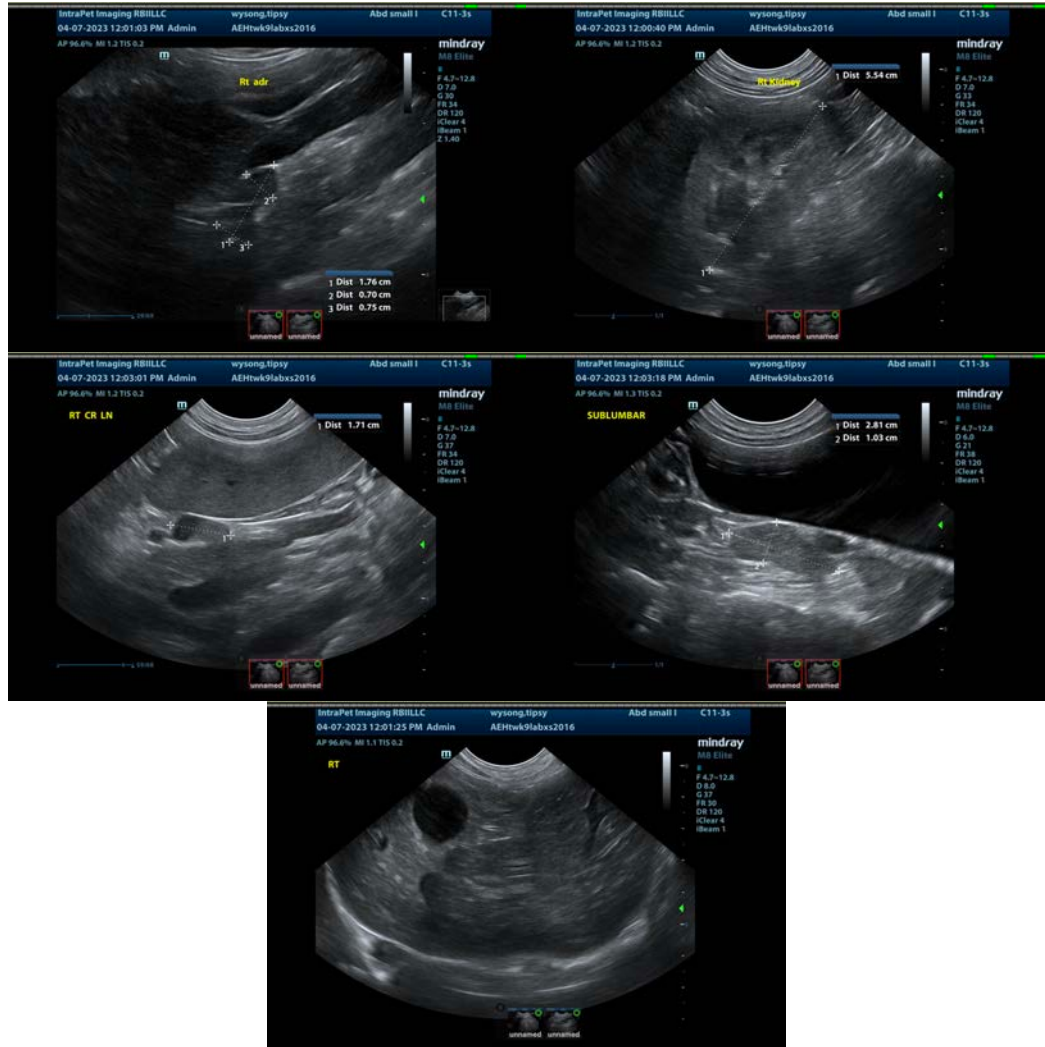
There is a moderate diffuse mesenteric lymphadenopathy present. Given the hypercalcemia reported, consider fine needle aspirate of a mesenteric lymph node and the spleen. Additionally, recommend a hypercalcemia of malignancy panel to Texas A&M for a PTH, PTHrP, and ionized calcium to further evaluate

the hypercalcemia. If not already done, a rectal exam to palpate the anal glands is recommended.

Recommend three view thoracic radiographs to evaluate for possible concurrent thoracic disease/involvement.

There are minimal changes observed associated with the kidneys, but this does not rule out significant renal disease. The hypercalcemia could be associated with the renal disease as well.





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