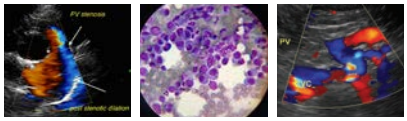
IMAGING PERFORMED BY

IntraPet.com



SonoPath

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DATE

4/19/23

PATIENT

Chloe Wyman

SPECIES

Canine

BREED

Boxer

SEX

Spayed Female

AGE

4/30/13

WEIGHT

60.3 Pounds

INTERPRETED BY

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

HOSPITAL NAME

PetVet of Clarksville

REFERRING VET

Dr. Martof

INVOICE

46772

PRESENTING CLINICAL SIGNS

Dog has cough which is resolving. Hx of proteinuria which has been treated with Benazepril. Blood pressure is 160. Latest urine revealed large amount of blood. O has not noticed any urinary signs.

Current Medications: Benazepril 10mg 1.5 tabs SID, Hycodan SID.
Lab Results: ALKP 900, Dexamethasone suppression test negative in 12/2022. UA 1.032, blood 3+.
Radiographs: Chest 2/2023 WNL- geriatric dog lungs.
Date of Previous IntraPet Ultrasound: 5/5/22. See attached.
Sedation: Declined.
Stat Report: Not requested.
Imaging Performed By: Rachel Brilhart, RDMS.

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.

The left kidney has a normal shape and size (7.01 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.

The right kidney has a normal shape and size (5.79 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.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.67 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 in size measuring 0.76 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.

Spleen

The spleen is subjectively normal in size. The spleen echotexture is heterogenous and mottled, the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. There is a hypoechoic nodule with a slightly hyperechoic center (almost with a target-like appearance) visualized towards the caudal third of the spleen, measuring 1.58 cm x 1.49 cm.

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 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 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 diffuse mesenteric lymphadenopathy. However, there is a small, hypoechoic structure surrounded by hyperechoic mesentery visualized caudal to the right kidney adjacent to the great vessels, measuring 1.03 cm x 1.02 cm. This could be consistent with a nodule/small mass effect or a lymph node.

Other

The right auricle and pericardium were visualized and were unremarkable. No obvious pathology is visualized. If cardiac function evaluation is desired a full echocardiogram is warranted.

There is no evidence of pleural effusion or nodules visualized on thoracic evaluation.

ULTRASONOGRAPHIC FINDINGS

- Mottled spleen with single hypoechoic splenic nodule – There is a non-cavitated, hypoechoic splenic nodule visualized. Differentials include lymphoid hyperplasia, extramedullary hematopoiesis, infiltrative neoplasia, inflammation, other. Cytology or histopathology would be necessary to get a definitive diagnosis.

- 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.

- Small, hypoechoic structure visualized caudal to the right kidney – The significance of this lesion is uncertain. This could represent a small/early mass effect, a benign omental nodule, or a lymph node.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

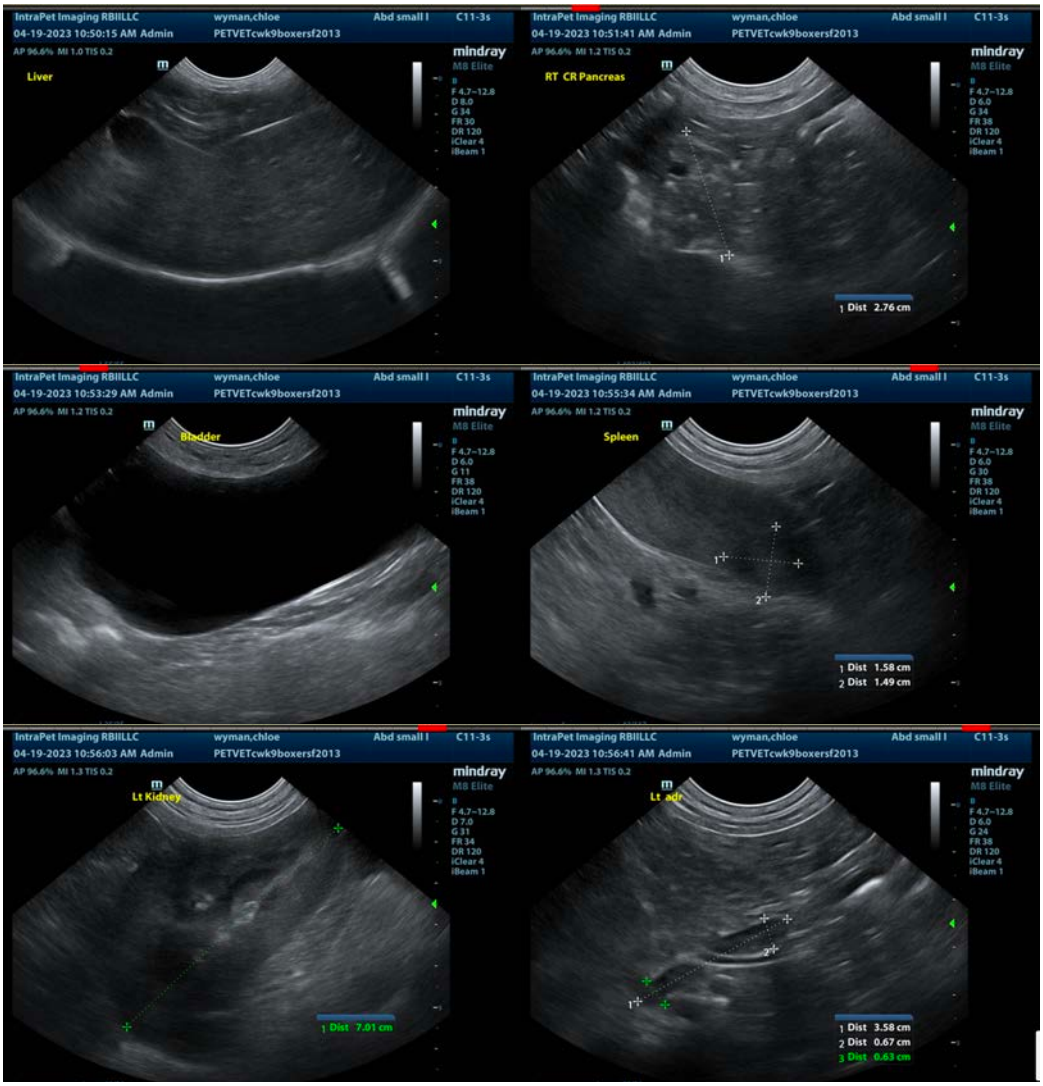
Significant patient panting during the exam slightly limits evaluation. Recommend sedation if further imaging is needed.

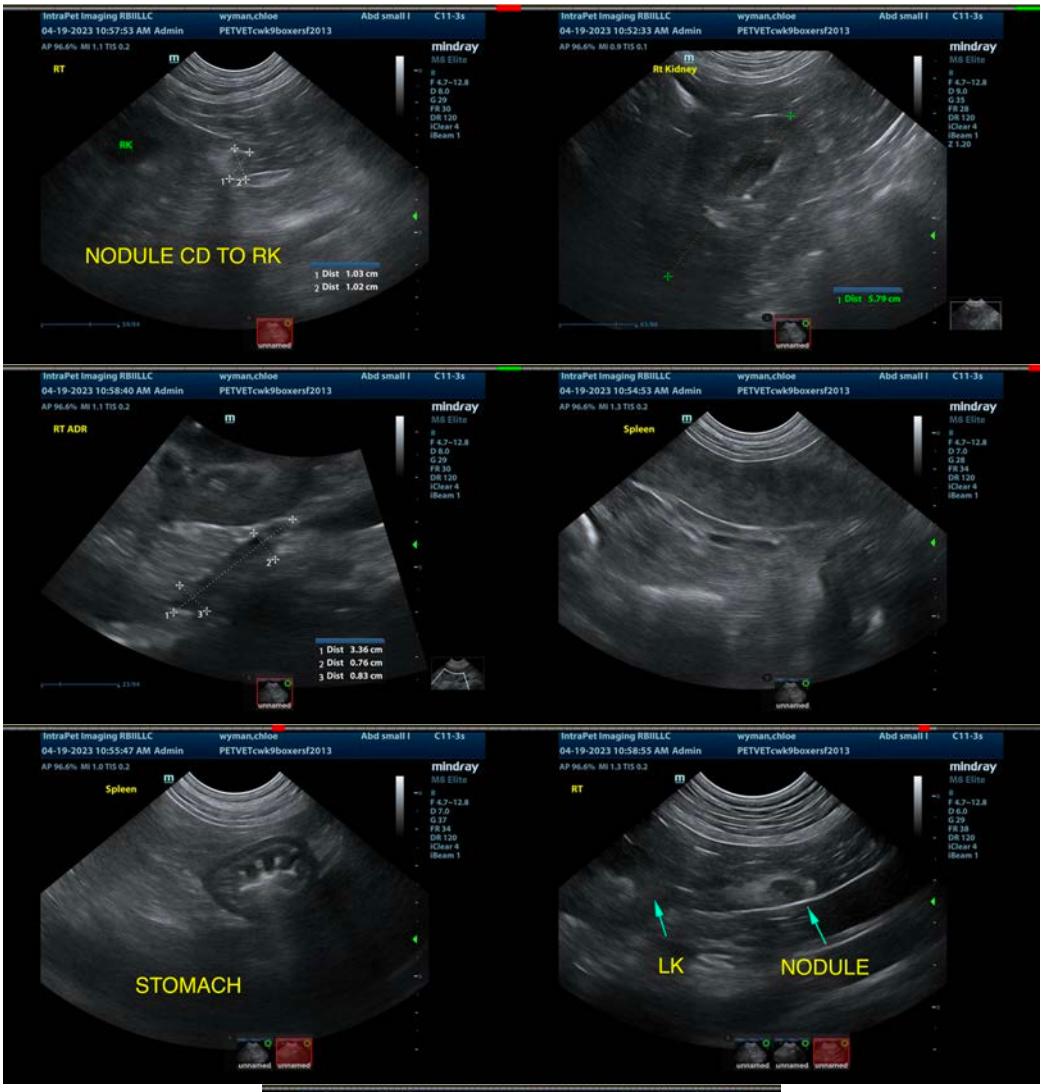
No lesions are visualized associated with the urinary tract to explain the blood noted in the urine. Consider a

urinalysis and culture, and if the hematuria persists, consider cystoscopy to evaluate the vaginal vault, distal urethra, etc. (areas that ultrasound cannot readily evaluate). Additionally, consider a rectal exam to palpate the pelvic urethra, looking for any thickening or irregularity.

The spleen appears somewhat mottled on today's exam, and there is a focal hypoechoic nodule in the spleen that has a slightly target-like appearance. Recommend a fine needle aspirate of this lesion. If sampling is not possible, then consider close monitoring with ultrasound (recheck in 8-12 weeks). Additionally, there is a small hypoechoic lesion caudal to the right kidney. I suspect this is a benign omental nodule, but continued monitoring is warranted, as this could be an early mass lesion and it is in the region of the great vessels.

The liver appears somewhat heterogeneous. This is a non-specific finding. Given the elevation in ALP reported, this could be consistent with a vacuolar hepatopathy. A fine needle aspirate would be necessary to further investigated.

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Bladder

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.

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