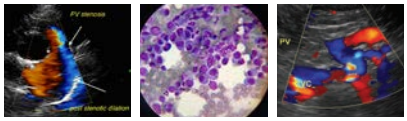
IMAGING PERFORMED BY

IntraPet.com



SonoPath

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DATE

12/21/21

PATIENT

Ruger Karmasek

SPECIES

Canine

BREED

German Shepherd

SEX

Neutered Male

AGE

1/1/10

WEIGHT

90 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Andi Parkinson RDMS

HOSPITAL NAME

AMC of Dulaney Valley

REFERRING VET

Dr. Chrest

INVOICE

33631

PRESENTING CLINICAL SIGNS

History: Hematuria. Also, skin issue, low thyroid (recently started thyroid meds).

Current Medications: Thyro Tabs 0.8 mg 1 tablet BID, started 11.30.21.
Lab Results: Attached separately.
Date of Previous IntraPet Ultrasound: No previous IntraPet scans.
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.

The prostate is borderline large in size, measuring 1.5 cm in height (measured in the sagittal view). It has a fairly regular shape with smooth external margins. The parenchyma is heterogeneous, but no discreet focal lesions are present. The prostatic urethra appears normal with no evidence of irregularity, invasion of mass effect, or calculi.

The left kidney has a normal shape and size (7.46 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.

The right kidney has a normal shape and size (8.12 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.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.78 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, 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 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 (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.

Other

A brief view of the heart was submitted. No significant pericardial effusion was seen.

ULTRASONOGRAPHIC FINDINGS

- Small, pinpoint nephroliths visualized in both kidneys – The hyperechoic mineralized foci observed at the corticomedullary junction of the left and right kidney are consistent with small, non-obstructive nephroliths.

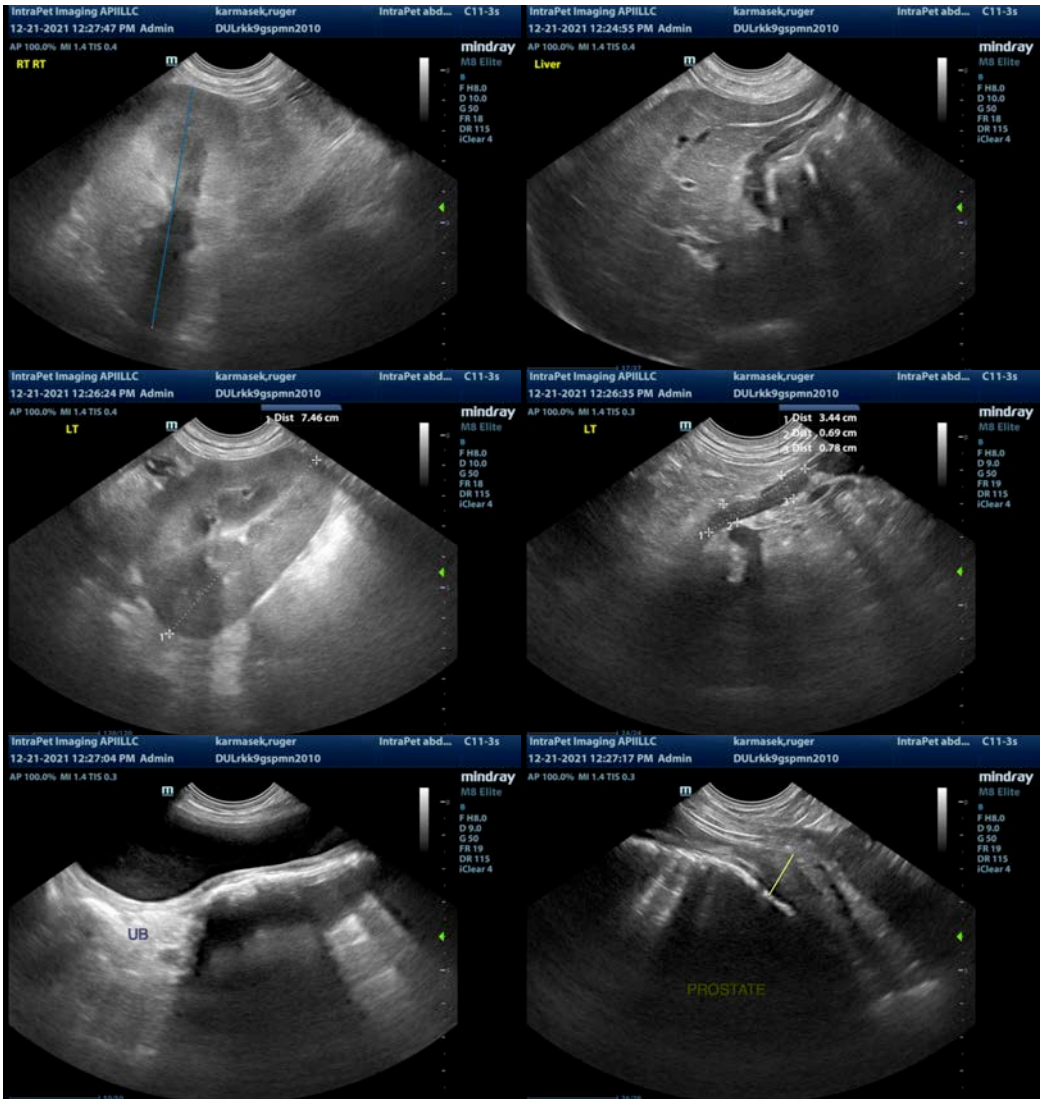
- Borderline large, heterogeneous prostate – Correlate with age of neutering. If this patient was neutered prior to puberty (typically less than approx. 6 months), then this could be large for the circumstances.

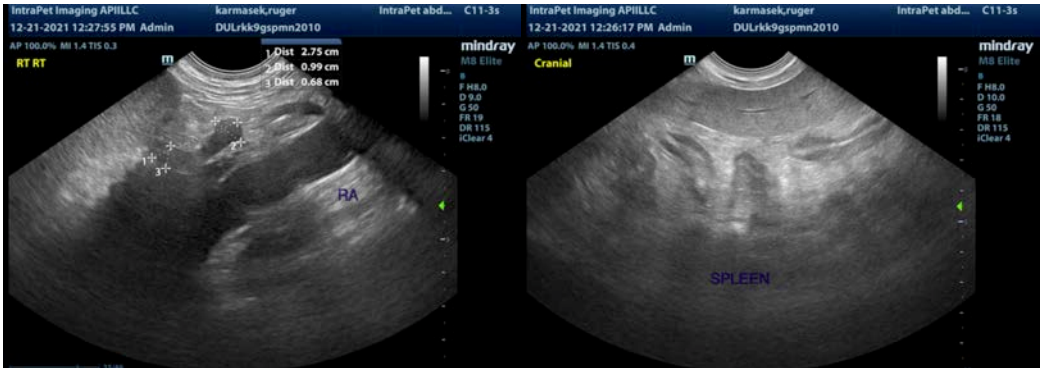
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

An obvious source for the hematuria noted is not visualized. The prostate is prominent, and if this pet was neutered prior to puberty, this could be abnormal, and could be consistent with a prostatic tumor. However, its shape is generally smooth, and it is free of focal lesions. Correlate with rectal exam findings. A fine needle aspirate of the prostate could be considered if this is thought clinically likely.

A urinalysis was not included with the history. Therefore, be sure to consider other differentials such as pigmenturia, bilirubinuria, etc., which can closely resemble blood and often don't have any lesions visualized. This patient's albumin levels are low, and it is anemic. Recommend a urine protein/creatinine ratio to look for evidence of renal protein loss, pre- and post-prandial bile acids to look for abnormal liver function, which could be an indicator of liver disease, and lack of albumin production. If rectal exam is normal (no melena),

you could consider a GI panel to look for any evidence of a cobalamin deficiency, etc., which could be supportive of small intestinal disease. Recommend close continued monitoring of red blood cell count, and consider tick borne disease testing in addition to possible treatment for hypothyroidism if though clinically likely, as this can sometimes cause a mild anemia.





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.

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