



PATIENT PRESENTING CLINICAL SIGNS

Boo Rapuano Patient presents for concern of enlarged adrenals/renal/prostate changes, PU/PD, recurring UTIs.

SPECIES Abnormal PE/Chem/CBC/UA Results: ALP 376.

Canine **ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

BREED *Urinary System*

Mixed 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 The prostate is normal in size (0.87 cm) and shape for this neutered male dog. The parenchyma is homogenous, and the external margins are smooth. The prostatic urethra appears normal with no evidence of irregularity, invasion, mass effect or calculi.
Neutered Male

AGE The left kidney has a normal shape and size (7.22 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.
9 Years

WEIGHT The right kidney has a normal shape and size (3.67 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.
N/A

INTERPRETED BY *Adrenal Glands*

Kathleen Sennello DVM, MS, Diplomate ACVIM (Small Animal Internal Medicine) The left adrenal gland is normal in size measuring 0.51 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 0.70 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.

IMAGING PERFORMED BY

Kelly Vazquez *Spleen*

HOSPITAL NAME

Ringwood AH 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 small, hypoechoic nodule visualized within the parenchyma measuring 0.96 cm.

REFERRING VET

Dr. DeSpirito *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.

INVOICE

40961 The gall bladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. There is a moderate amount of non-organized echogenic debris. The cystic and common bile ducts are normal/not visible.

DATE

9/1/22



PATIENT

Gastrointestinal

Boo Rapuano

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.

SPECIES

Canine

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.)

BREED

Mixed

Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

SEX

Neutered Male

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

AGE

9 Years

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

WEIGHT

N/A

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

INTERPRETED BY

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

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

ULTRASONOGRAPHIC FINDINGS

IMAGING PERFORMED BY

Kelly Vazquez

- Hypoechoic nodule visualized within the splenic parenchyma – 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.
- Mildly 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.
- Moderate gallbladder debris – The significance of the aggregated gallbladder debris is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting but seems unlikely to be causing a current issue. Recommend continued monitoring.

HOSPITAL NAME

Ringwood AH

REFERRING VET

Dr. DeSpirito

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

INVOICE

40961

The lesions observed on today's scan are relatively mild and non-specific. There is a small hypoechoic nodule visualized within the spleen. This could be a benign lesion or an early neoplastic lesion. Options moving forward would include continued monitoring with ultrasound or a fine needle aspirate.

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Additionally, the liver appears mildly heterogeneous and there is a small amount of debris visualized within the gallbladder. These changes appear relatively benign in nature, but you could consider a liver



PATIENT

Boo Rapuano

function test and a fine needle aspirate of the liver to further workup the PU/PD reported. Both adrenals appear relatively normal in size. This does not exclude a diagnosis of Cushing's disease but makes it less likely.

SPECIES

Canine

No lesions were visualized associated with the prostate and urinary bladder to explain the urinary tract infections reported. Consider urinary tract infections (particularly E.coli infections) as a possible source for PU/PD, if that is applicable.

BREED

Mixed

SEX

Neutered Male

AGE

9 Years

WEIGHT

N/A

INTERPRETED BY

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(Small Animal Internal
Medicine)

IMAGING PERFORMED BY

Kelly Vazquez

HOSPITAL NAME

Ringwood AH

REFERRING VET

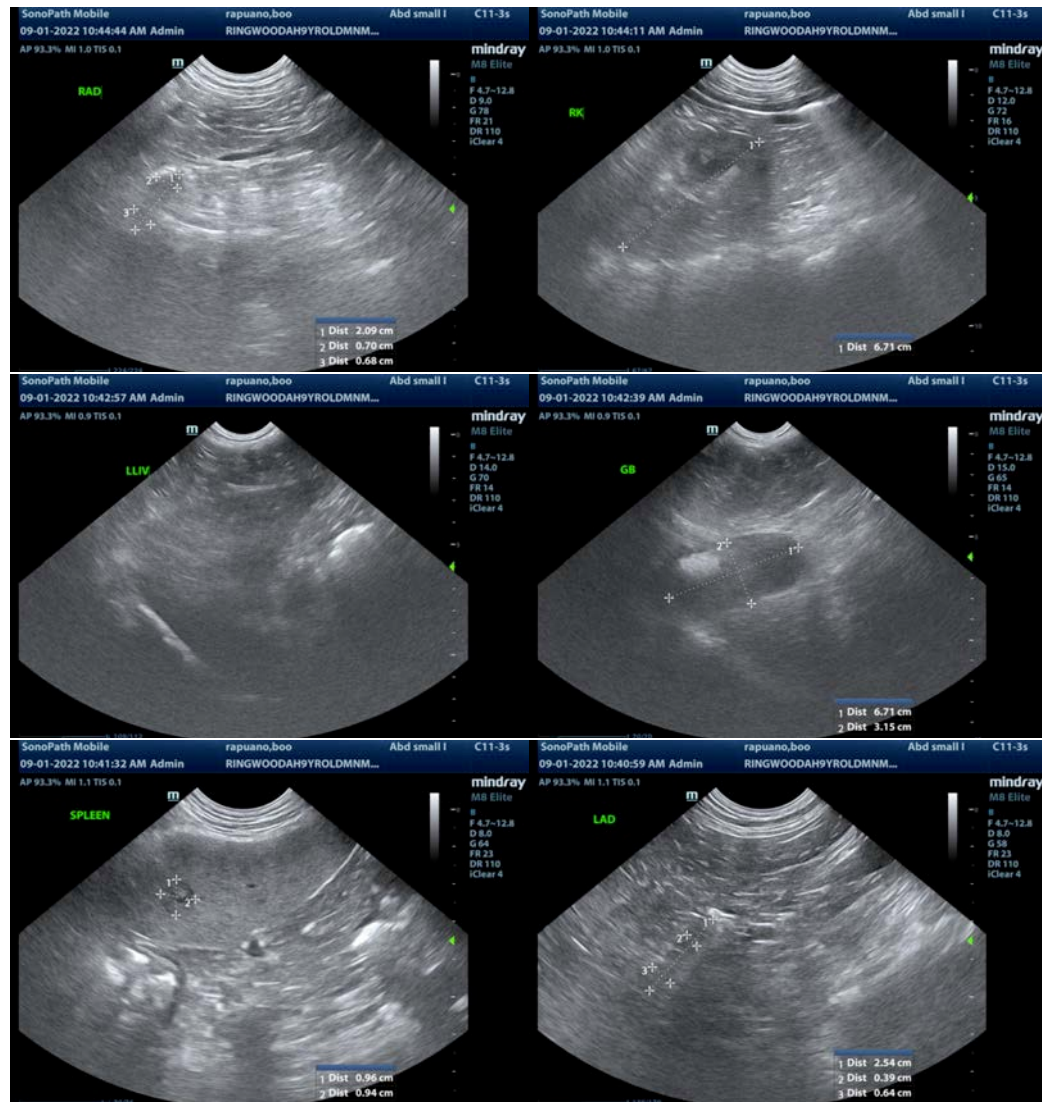
Dr. DeSpirito

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Boo Rapuano

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AGE

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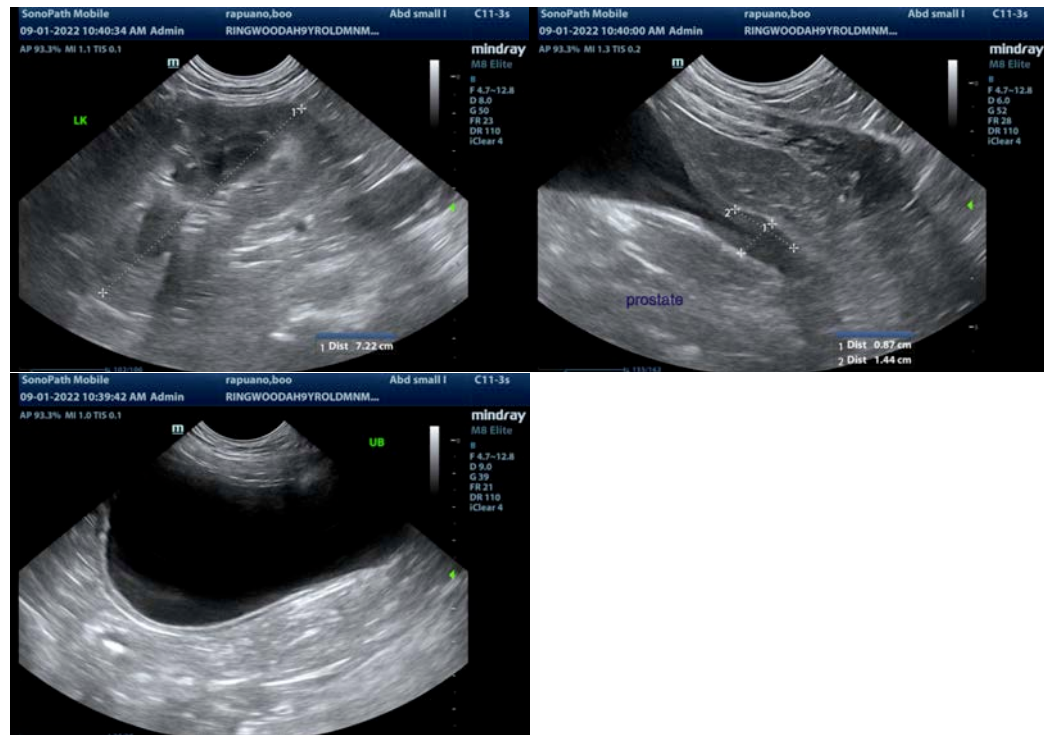
Dr. DeSpirito

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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)

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