



PATIENT PRESENTING CLINICAL SIGNS

Rebel Rizzo
Patient presents for hepatomegaly seen on radiographs, tense cranial abdomen upon palpation
Abnormal PE/Chem/CBC/UA Results: ALT 278. U/A: 1+ protein, 4-10 WBC, 21-50 CaOxalate crystals, USG 1.037.

SPECIES

Canine

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

BREED

Urinary System

Collie

The urinary bladder is moderately distended with mildly echogenic 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, or masses. There is some suspended shadowing hyperechoic material as well as some dependent shadowing material most consistent with small mineralized stones and sandy debris. Two of the larger stones visualized measure 0.37 cm and 0.45 cm.

SEX

Intact Male

The prostate is large in size (3.51 cm x 3.23 cm) and hyperechoic, but has a regular shape with smooth external margins. The parenchyma is heterogenous but no discrete focal lesions are present. The prostatic urethra appears normal with no evidence of irregularity, invasion, mass effect or calculi.

AGE

4 Years

The left kidney has a normal shape and size (7.03 cm) with non-obstructive nephroliths, two of which measure 0.64 cm and 0.57 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, infarcts or hydroureter. Renal vasculature is normal.

WEIGHT

117.5 Pounds

The right kidney has a normal shape and size (7.64 cm) with a non-obstructive nephrolith measuring 0.75 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, infarcts or hydroureter. Renal vasculature is normal.

INTERPRETED BY

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

Adrenal Glands

The left adrenal gland is normal in size measuring 0.32 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.

IMAGING PERFORMED BY

Kelly Vazquez

The right adrenal gland is normal in size measuring 0.50 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.

HOSPITAL NAME

Spleen

Ramapo Valley 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. No focal parenchymal abnormalities are visualized.

REFERRING VET

Dr. Gary Duhr

Liver

The liver is subjectively normal in size with smooth peripheral margins. The parenchyma is hyperechoic and homogenous in echotexture. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed.

INVOICE

40541

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.

DATE

8/17/22



PATIENT

Gastrointestinal

Rebel Rizzo

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

Collie

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

SEX

Intact 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

4 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

117.5 Pounds

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

Both testicles are visualized and appear within normal limits.

INTERPRETED BY

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

ULTRASONOGRAPHIC FINDINGS

- Mineralized debris/small stones in the dependent portion of the urinary bladder – Recommend urinalysis and culture. Correlate with abdominal radiographs.
- Large, hyperechoic prostate – most consistent with benign prostatic hypertrophy +/- prostatitis.
- Non-obstructive nephroliths visualized in both kidneys – The hyperechoic mineralized foci observed at the corticomedullary junction of the left/right kidney are consistent with small, non-obstructive nephroliths.
- Hyperechoic liver – The diffuse hepatic changes are non-specific and can be seen with vacuolar hepatopathy, reactive change, nodular hyperplasia or, less likely, inflammatory/immune-mediated disease, infiltrative neoplasia, or other hepatopathy.

IMAGING PERFORMED BY

Kelly Vazquez

HOSPITAL NAME

Ramapo Valley AH

REFERRING VET

Dr. Gary Duhr

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There are small stones and sandy debris visualized in the urinary bladder. I suspect this debris is too large to easily pass. Recommend urinalysis and culture and abdominal radiographs to correlate the number and size of stones present. If an infection is present, consider treating it to see if the stones will dissolve. If not, cystotomy may be necessary.

INVOICE

40541

DATE

8/17/22

The liver appears mildly hyperechoic. This is a non-specific finding. No focal lesions are visualized to explain the ALT elevation reported. These are my recommendations for further evaluation:



PATIENT

Rebel Rizzo

- Consider close evaluation of history for possible toxic changes examine medications, diet, dietary indiscretion etc...

SPECIES

Canine

- Consider PCR on urine/serum for leptospirosis (if not on antibiotics)/serology if recent antibiotic history

BREED

Collie

- If not already done, consider pre and post prandial bile acids to evaluate liver function
- Consider Fine needle aspirate if round cell neoplasia is on your differential list (25 g needle, normal coags)
- If no response to medical care (denamarin, antibiotics,+/- ursodiol etc...) Consider liver biopsy with samples obtained for histopathology, culture, and copper levels.

SEX

Intact Male

If urinalysis and culture demonstrates an infection, then there is the possibility that there is concurrent prostatitis and that neutering may be beneficial for trying to resolve the infection.

AGE

4 Years

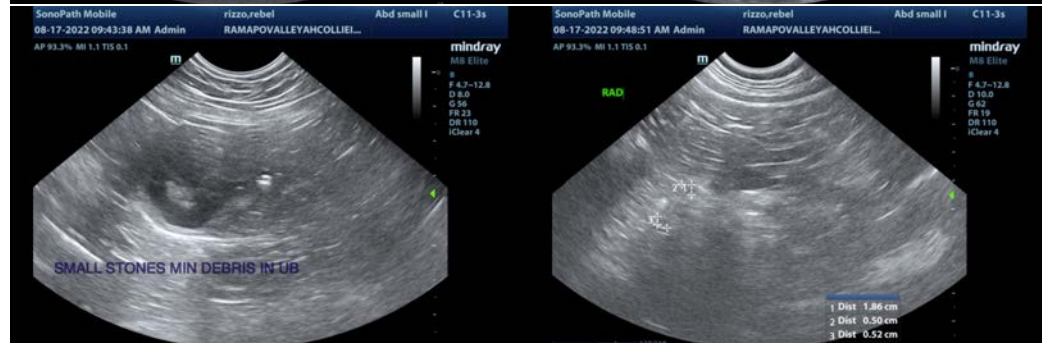
WEIGHT

117.5 Pounds



INTERPRETED BY

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

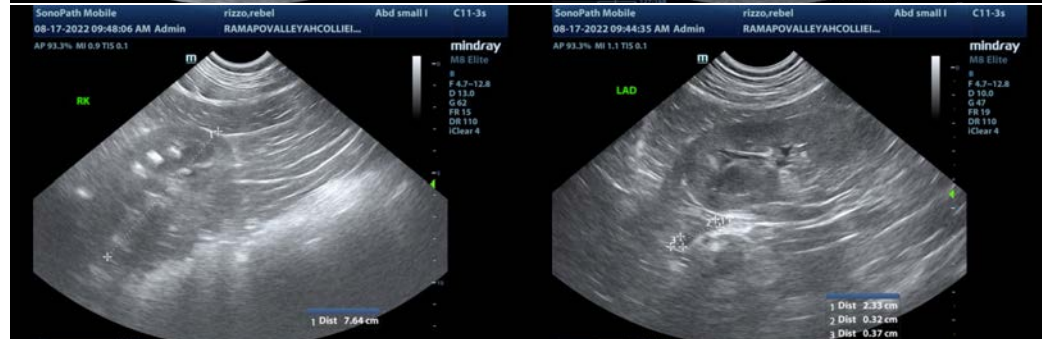


IMAGING PERFORMED BY

Kelly Vazquez

HOSPITAL NAME

Ramapo Valley AH



REFERRING VET

Dr. Gary Duhr

INVOICE

40541

DATE

8/17/22



PATIENT

Rebel Rizzo

SPECIES

Canine

BREED

Collie

SEX

Intact Male

AGE

4 Years

WEIGHT

117.5 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Kelly Vazquez

HOSPITAL NAME

Ramapo Valley AH

REFERRING VET

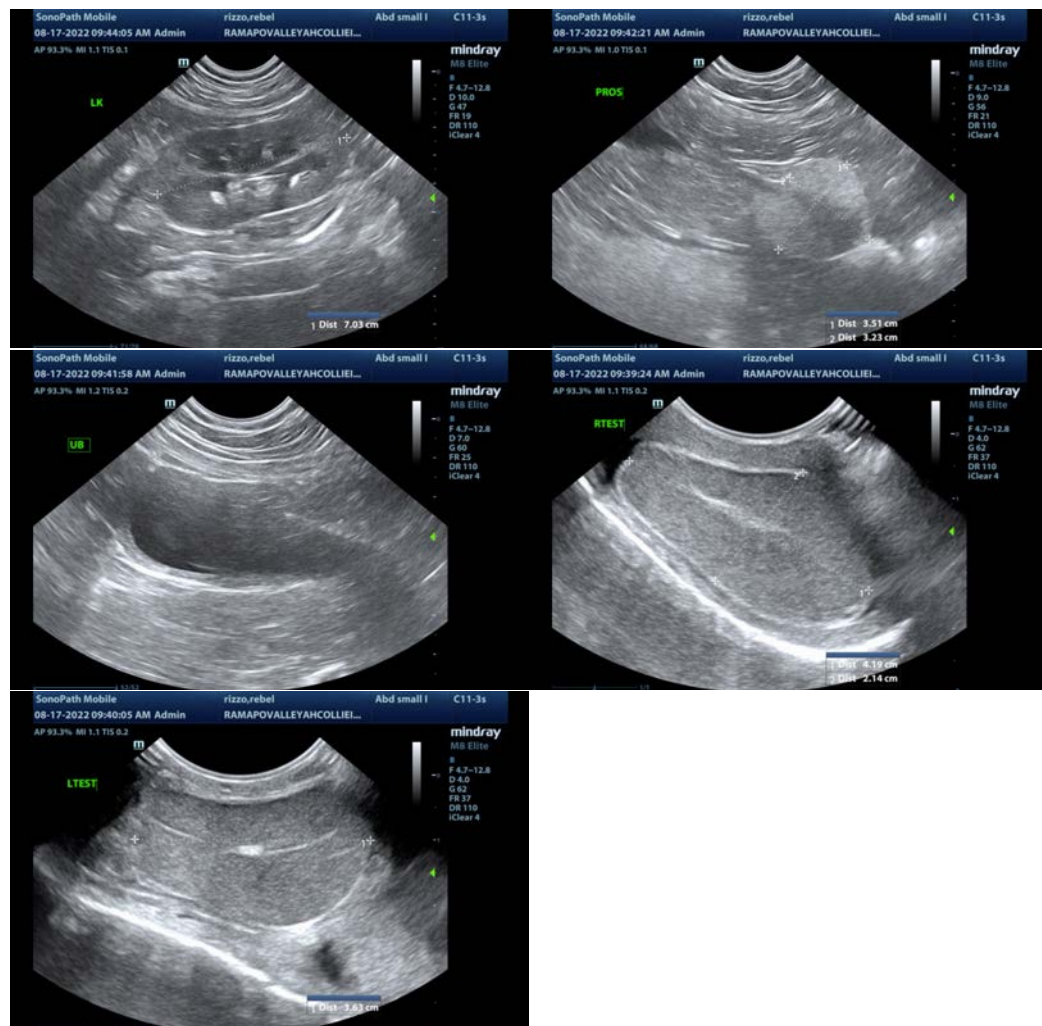
Dr. Gary Duhr

INVOICE

40541

DATE

8/17/22



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