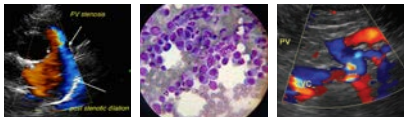
IMAGING PERFORMED BY

IntraPet.com



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com

DATE

1/6/23

PATIENT

Rahjah James

SPECIES

Canine

BREED

Rottweiler X

SEX

Male

AGE

9/16/19

WEIGHT

84.3 Pounds

INTERPRETED BY

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

HOSPITAL NAME

Animal Emergency Hospital

REFERRING VET

Dr. Martinoli

INVOICE

44003

PRESENTING CLINICAL SIGNS

No history of urinary issues. Since yesterday, owner has not seen him urinate; was only passing drops at a time.

Current Medications: Buprenorphine, Baytril.
Lab Results: UA - RBC, WBC, Crystals -- non-specific, Calcium Ox, and Struvite
Radiographs: No radiopaque bladder stones noted.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Rachel Brilhart, RDMS.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

On initial evaluation, the urinary bladder is empty with a foley catheter placed appropriately in the trigone region. Saline was instilled into the urinary bladder via the foley catheter, revealing diffuse thickening and irregularity of the bladder wall and mucosa, as well dependent hyperechoic shadowing material consistent with stones, sandy debris, etc. The area of the trigone, ureteral papillae, and proximal urethra are evaluated to the extent possible with the foley catheter in place, and there is no evidence of any mass lesions or calculi. One of the larger stones visualized measures 0.74 cm. Correlate these findings with abdominal radiographs. Recommend urinalysis and culture.

The prostate is large and hyperechoic, measuring approximately 5.45 cm in width and 4.0 cm in height. It has a regular shape with smooth external margins. No discrete focal lesions are present, and the prostatic urethra (to the extent it can be evaluated with a foley catheter in place) appears normal with no evidence of irregularity, invasion, mass effect, or calculi.

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.

The right kidney has a normal shape and size (7.38 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/borderline small in size measuring 0.55 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/borderline small in size measuring 0.68 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 large 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.

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 a large amount of fluid/ingesta. 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 mild to moderate 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. Jejunum wall measures 0.33 cm. 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 non-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 prominent and mottled compared to the surrounding isoechoic 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
Both testicles are visualized and appear within normal limits.

PRIMARY FINDINGS

- Thickened, irregular urinary bladder wall with dependent calculi and sandy debris – Findings are most consistent with calculi and cystitis. Correlate with abdominal radiographs, urinalysis and culture.

- Large hyperechoic prostate – Findings are most consistent with benign prostatic hypertrophy +/- prostatitis.

- 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.

- Large amount of fluid/ingesta within the gastric lumen – Correlate these findings with feeding history. If the patient was adequately fasted, consider the possibility of delayed gastric emptying or a partial outflow tract obstruction (none observed, but retained fluid impairs visualization of the pylorus).

SECONDARY FINDINGS

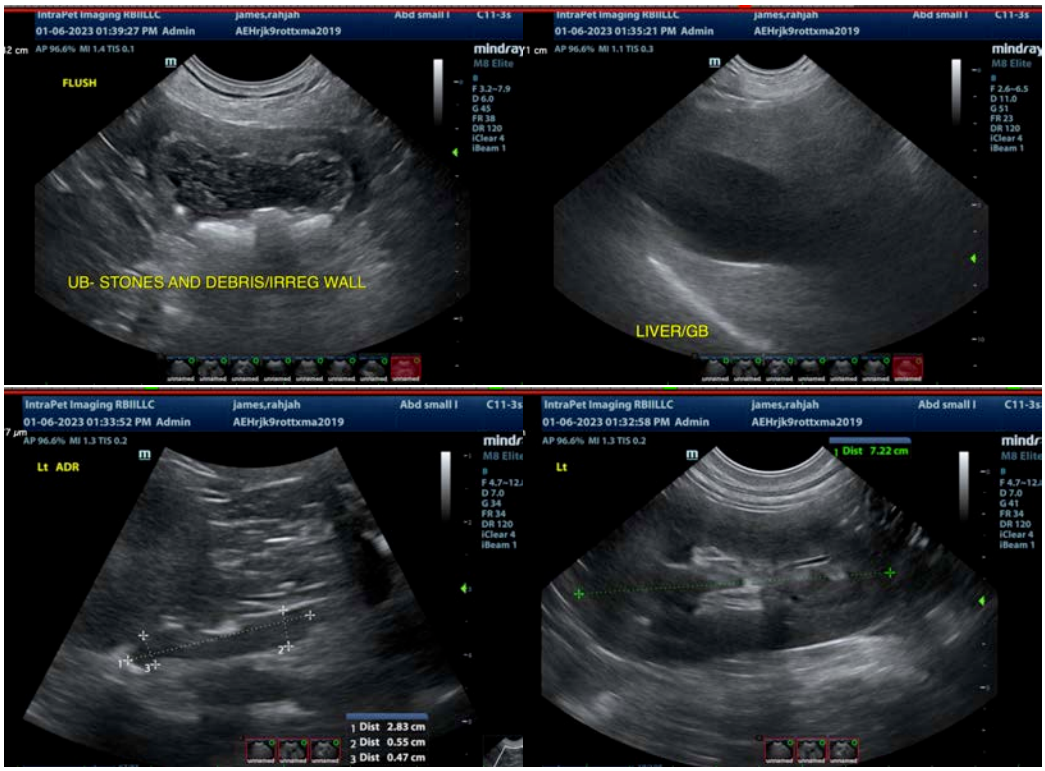
- Prominent, mottled pancreas – The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.

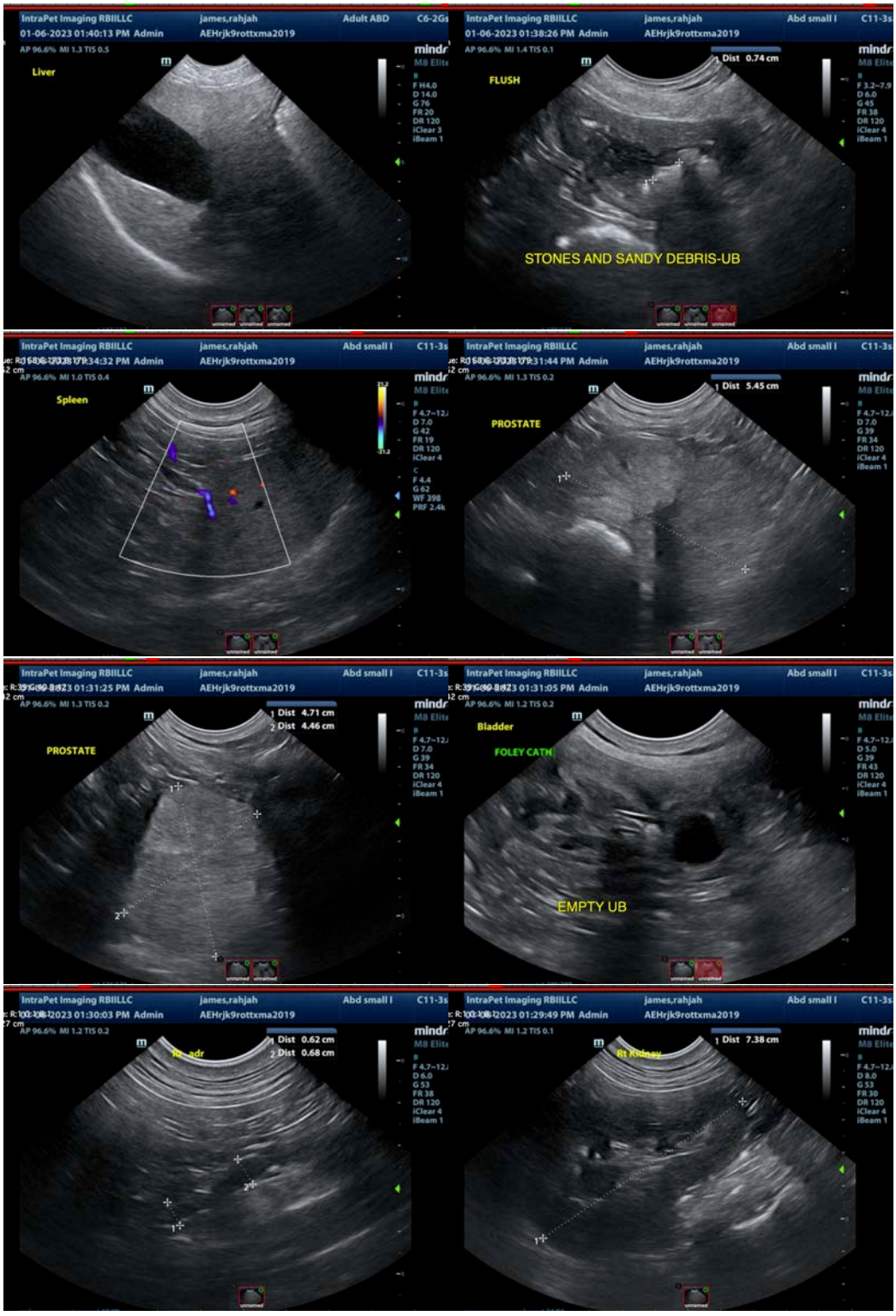
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

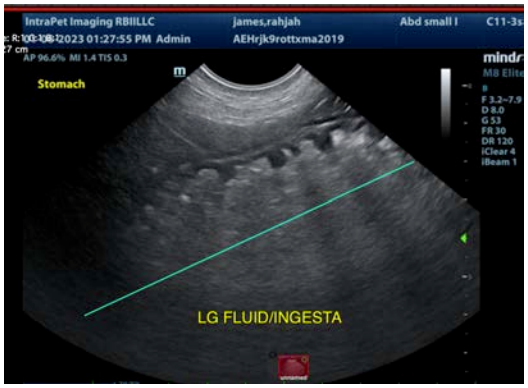
There is as large amount of debris, inflammation, and small stones within the urinary bladder. It is likely that either this individual was straining with an empty bladder or that a stone had occluded the urethra. Additionally, the prostate is large, which can further impede passage through the pelvic canal. Based on the urinalysis results, these could be struvite or calcium oxalate. I would consider either attempted dissolution of these stones while treating the urinary tract infection, or a cystotomy. Additionally, ideally this patient would be neutered, as there is concern that the infection may involve the prostate, and the prostate is additionally narrowing the pelvis, potentially making passage of the stones more difficult. A fine needle aspirate of the prostate could be considered to look for underlying inflammation.

The stomach is distended with ingesta and fluid most likely. Recommend continued monitoring to ensure that the stomach empties normally and there is no issues with ileus or an outflow tract obstruction.

The liver appears somewhat generous and hyperechoic, but in light of normal liver values, this could be within normal limits for this individual.




IntraPet Imaging RBIILLC
james,rahjah
Adult ABD
01-06-2023 01:40:13 PM Admin
AEHrjk9rottxma2019
Liver
IntraPet Imaging RBIILLC
james,rahjah
Abd small I
01-06-2023 01:38:26 PM Admin
AEHrjk9rottxma2019
FLUSH
Dist 0.74 cm
STONES AND SANDY DEBRIS-UB
IntraPet Imaging RBIILLC
james,rahjah
Abd small I
Spleen
IntraPet Imaging RBIILLC
james,rahjah
Abd small I
01-06-2023 01:31:44 PM Admin
AEHrjk9rottxma2019
PROSTATE
Dist 5.45 cm
IntraPet Imaging RBIILLC
james,rahjah
Abd small I
PROSTATE
Dist 4.71 cm
Dist 4.46 cm
IntraPet Imaging RBIILLC
james,rahjah
Abd small I
01-06-2023 01:31:05 PM Admin
AEHrjk9rottxma2019
Bladder
FOLEY CATH
EMPTY UB
IntraPet Imaging RBIILLC
james,rahjah
Abd small I
Dist 0.62 cm
Dist 0.68 cm
IntraPet Imaging RBIILLC
james,rahjah
Abd small I
01-06-2023 01:29:49 PM Admin
AEHrjk9rottxma2019
Rt Kidney
Dist 7.38 cm



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