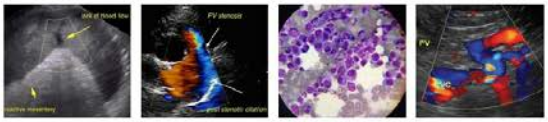
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com



IMAGING PERFORMED BY
pawsonography@gmail.com 530-786-8340

PATIENT

Diego Rice

SPECIES

Canine

BREED

Terrier/Lab X

SEX

Neutered Male

AGE

10 Years

WEIGHT

33.5 Pounds

INTERPRETED BY

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

IMAGING BY

Loetitia Saint-Jacques, LVT

HOSPITAL NAME

North Hills VC

REFERRING VET

Dr. David Baggett

INVOICE

39419

DATE

7/12/22

PRESENTING CLINICAL SIGNS

Seen a few weeks ago for urinary difficulty, and treated for a UTI with Clavamox. He continued to have trouble, and seen again in ER after he had several attempts without successfully making urine over several hours. His X-Rays showed a significantly enlarged prostate. Meloxicam and Prazosin sent home. Not straining to urinate since meds started. No blood noted in urine by owner-
Abnormal PE/Chem/CBC/UA Results: 5/2022- BUN 33, Crea 1.0, LABS attached NO sedation

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is moderately distended with anechoic urine. The Bladder wall appears relatively normal, measuring at 0.27 cm. No calculi or intraluminal mass lesions are observed. The are of the proximal urethral at the cystourethral junction appears somewhat thickened. This area is somewhat difficult to delineate due to lack of significant urinary bladder distention, but the wall thickness in this region is approximately 0.80 cm. Dilation of the distal left ureter is visualized in this region, measuring at 0.82 cm, likely consistent with either an ectopic ureter or lack of urinary distention, making the trigone area difficult to clearly visualize. There is concern for possible abnormal tissue/thickened irregular tissue in the proximal urethra.

The prostate appears large, measuring approximately 2.19 cm in the sagittal view. It is hypoechoic with numerous hyperechoic foci, and it appears to extend somewhat orad towards the cystourethral junction. In this region, the urethra appears somewhat occluded. There is concern for irregular tissue in this region, occluding the distal ureter, but evaluation is somewhat impaired by lack of urine distention.

The left kidney has a normal shape and size (6.08 cm.) There is early hydronephrosis evident with the renal pelvis measuring at 0.87 cm. There is no evidence of proximal ureteral dilation.

The right kidney has a normal shape and size (6.0 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, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

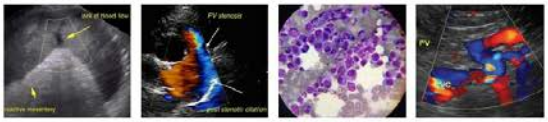
The left adrenal gland is normal in size measuring XXcm at the caudal pole. It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

The right adrenal gland is normal in size measuring 0.62 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. There is a small, well demarcated, hypoechoic nodule visualized in the spleen measuring 0.78 cm.

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



IMAGING PERFORMED BY
pawsonography@gmail.com 530-786-8340

PATIENT

Diego Rice

SPECIES

Canine

BREED

Terrier/Lab X

SEX

Neutered Male

AGE

10 Years

WEIGHT

33.5 Pounds

INTERPRETED BY

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

IMAGING BY

Loetitia Saint-Jacques, LVT

HOSPITAL NAME

North Hills VC

REFERRING VET

Dr. David Baggett

INVOICE

39419

DATE

7/12/22

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. There is an ill-defined focal hypoechoic region in the liver measuring 1.34 cm x 2.89 cm.

The gall bladder lumen is moderately distended. The wall of the gall bladder has irregular polypoid projections and there is a moderate amount of non-organized echogenic debris. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

The stomach is dilated with a moderate to large amount of fluid and irregular shadowing material most consistent with normal ingesta and gas. 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 layering 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

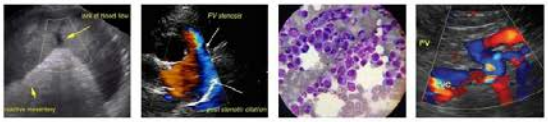
Evaluation of the peritoneal cavity did not reveal any evidence of effusion. Sublumbar lymph nodes are visible. The left measures 0.55 cm. The omentum appears to be of normal echogenicity.

Other

A brief view of the heart was submitted with possible scant pericardial effusion. Consider cardiac ultrasound for more complete evaluation.

ULTRASONOGRAPHIC FINDINGS

- Large, irregular prostate with hyperechoic foci – correlate with age of neutering. If this patient was neutered prior to puberty, this is an abnormal prostate with concern for possible obstruction of the left ureter. Of primary concern would be prostatic neoplasia.
- Early hydronephrosis of the left kidney – No evidence of proximal ureteral dilation is visualized, but the distal ureter does appear significantly dilated. Recommend urinalysis



PATIENT

Diego Rice

SPECIES

Canine

BREED

Terrier/Lab X

SEX

Neutered Male

AGE

10 Years

WEIGHT

33.5 Pounds

INTERPRETED BY

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

IMAGING BY

Loetitia Saint-Jacques, LVT

HOSPITAL NAME

North Hills VC

REFERRING VET

Dr. David Baggett

INVOICE

39419

DATE

7/12/22

and culture.

- Small, focal, 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.
- Suspect thickening of the tissue at the cystourethral junction – This is difficult to evaluate due to lack of urine distention, but there is concern for an early possible mass lesion in this region.
- Heterogeneous liver with ill-defined hypoechoic lesion – 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. The appearance of the hypoechoic region trends towards a more benign lesion, but continued monitoring is warranted, as neoplasia cannot be excluded.
- Mild gallbladder polyps – There is a very small amount of frondlike material visualized along the gallbladder wall, consistent with early polyps. These can be seen associated with inflammation/early cholecystitis.
- Large amount of shadowing debris within the gastric lumen –Correlate with feedings history and abdominal radiographs. If adequately fasted then consider such differentials as delayed gastric emptying or a partial outflow tract obstruction (none visualized).

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Evaluation of the lower urinary tract is challenging due to lack of urine distention of the urinary bladder.

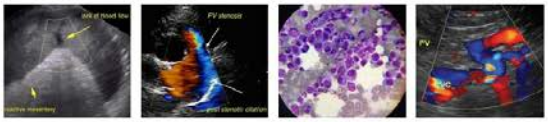
The prostate appears large and possibly mineralized. Correlate these findings with the age of neutering. If this patient was neutered prior to puberty, then there is a strong concern for an abnormal prostate and possible underlying prostatic neoplasia.

• Recommend a fine needle aspirate of the prostate. If the patient was neutered after puberty and/or had previous prostatic disease, then some of these changes could be residual. I would still recommend a fine needle aspirate of the prostate

• Consider catheterization to distend the bladder and evaluate the cystourethral junction/trigone region. (a traumatic cath sample could be obtained at this time for cytology)

Additionally, you could consider a contrast study (IVP, contrast CT) , as the distal urethra appears somewhat dilated, but the proximal urethra is not obviously dilated, and there is hydronephrosis present, so the location of the obstruction is not 100% clear. Additionally, you can have a mildly ectopic ureter that is just slightly displaced, that could be dilated chronically and unrelated to the prostate.

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



IMAGING PERFORMED BY
pawsonography@gmail.com 530-786-8340

PATIENT

Diego Rice

SPECIES

Canine

BREED

Terrier/Lab X

SEX

Neutered Male

AGE

10 Years

WEIGHT

33.5 Pounds

INTERPRETED BY

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

IMAGING BY

Loetitia Saint-Jacques, LVT

HOSPITAL NAME

North Hills VC

REFERRING VET

Dr. David Baggett

INVOICE

39419

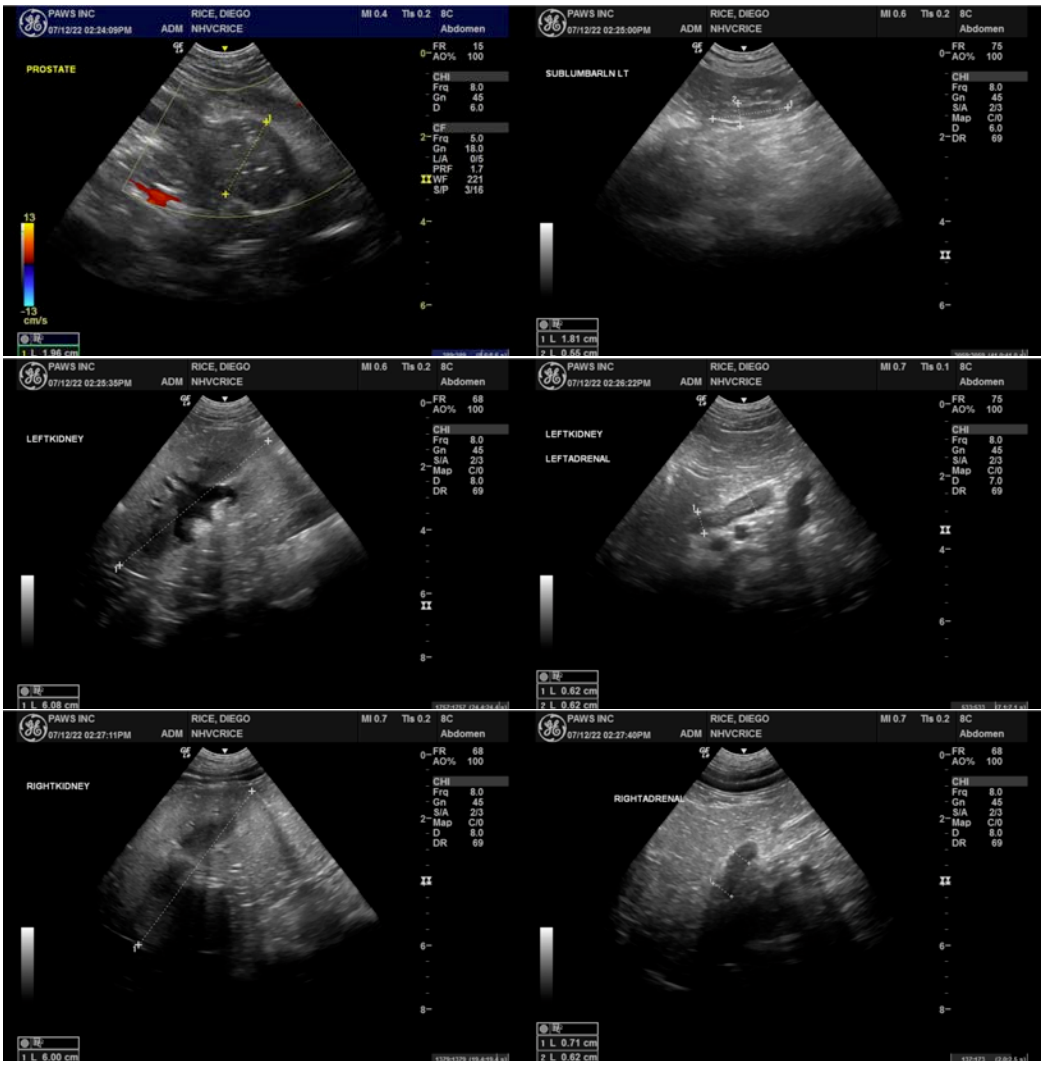
DATE

7/12/22

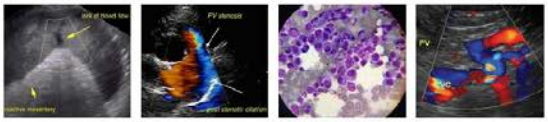
Overall, I'm concerned about the appearance of the lower urinary tract. I'm concerned that there could be prostatic neoplasia with invasion into the proximal urethra, causing an obstruction, but other benign etiologies exist, so pursuring a diagnosis is warranted. Recommend urinalysis and culture. Additionally, a traumatic catheterization at the level of the cystourethral junction/prostatic urethra could be helpful.

Consider three view thoracic radiographs to rule out concurrent thoracic disease/involvement.

There is a small hypoechoic nodule in the spleen. This could represent a neoplastic or benign process. Consider a fine needle aspirate. Additionally, the liver is heterogeneous with an ill-defined hypoechoic region. Options are to continue monitoring or to consider a fine needle aspirate.



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



IMAGING PERFORMED BY
pawsonography@gmail.com 530-786-8340

PATIENT

Diego Rice

SPECIES

Canine

BREED

Terrier/Lab X

SEX

Neutered Male

AGE

10 Years

WEIGHT

33.5 Pounds

INTERPRETED BY

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

IMAGING BY

Loetitia Saint-Jacques, LVT

HOSPITAL NAME

North Hills VC

REFERRING VET

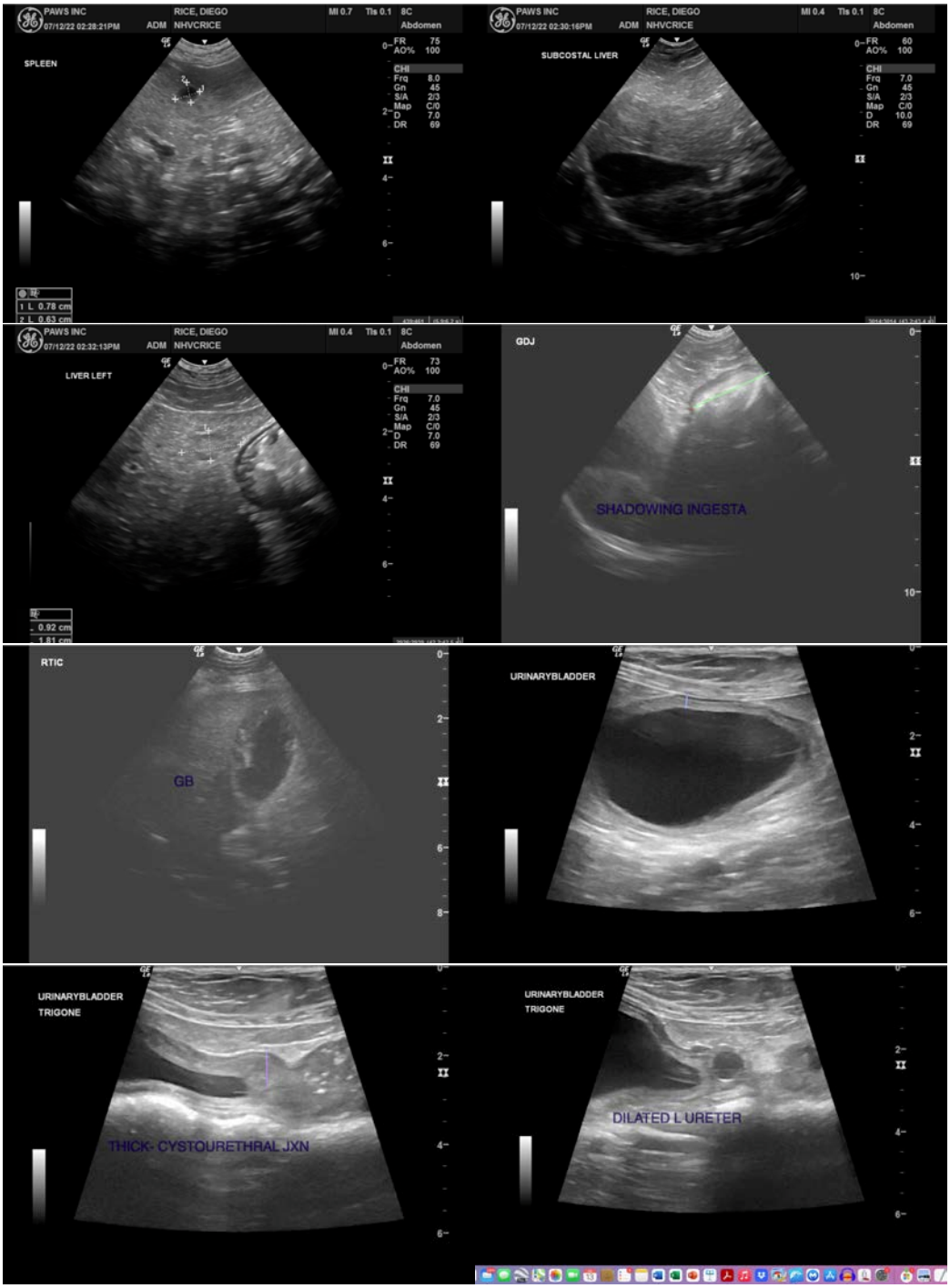
Dr. David Baggett

INVOICE

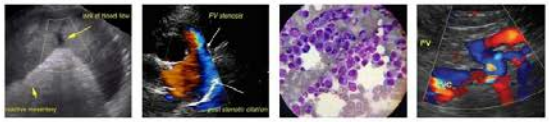
39419

DATE

7/12/22



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



IMAGING PERFORMED BY
pawsonography@gmail.com 530-786-8340

PATIENT

Diego Rice

SPECIES

Canine

BREED

Terrier/Lab X

SEX

Neutered Male

AGE

10 Years

WEIGHT

33.5 Pounds

INTERPRETED BY

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

IMAGING BY

Loetitia Saint-Jacques, LVT

HOSPITAL NAME

North Hills VC

REFERRING VET

Dr. David Baggett

INVOICE

39419

DATE

7/12/22

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