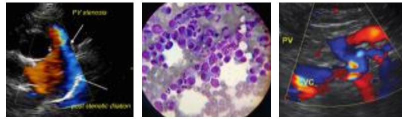
IMAGING PERFORMED BY

IntraPet.com



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
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DATE

3/20/23

PATIENT

Yuno Rebbert

SPECIES

Canine

BREED

Husky

SEX

Neutered Male

AGE

2/27/22

WEIGHT

42.4 Pounds

INTERPRETED BY

Beth Johnson, DVM
DACVIM

HOSPITAL NAME

Animal Emergency
Hospital

REFERRING VET

Dr. Trout

INVOICE

21726

PRESENTING CLINICAL SIGNS

History: Did well post discharge from AEH for a few days. Around Wednesday his appetite started to decrease O noticed straining and vocalizing when defecating today, small stools. Medication administration has been inconsistent due to decreased appetite. P vomited three times yesterday, did eat some today and kept it down. Had cryptorchid (bilateral) surgery with RDVM on 3/8/23-presented to us on 3/9/23 for vomiting, diarrhea, pain; responded well to medical management and was discharge on 3/11/23.

Current Medications: Protonix and Gabapentin.
Radiographs: Suspicious gas pattern, loss of detail in the caudal abdomen. Ingesta moving through, no obvious obstructive pattern, decreased detail in the caudal abdomen.
Date of Previous IntraPet Ultrasound:
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

Urinary bladder is adequately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

Prostate is normal in size, echotexture and echogenicity for an intact dog, that was very recently neutered.

Left kidney is normal in size (5.79 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

Right kidney is normal in size, shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of mineral or infarcts observed. Moderate to marked pyelectasia is noted, measuring 0.5 cm in the transverse view. In addition, the ureter is dilated, and can be followed all the way to the caudal abdomen, ending in an area in the right caudal abdomen, that contains enhanced hyperechoic mesenteric fat and a scant amount of anechoic free fluid.

Adrenal Glands

Adrenal glands are small (flattened contour). Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal. The left adrenal gland measured 2.75 cm long x 0.46 cm at the cranial pole and 0.51 cm at the caudal pole. The right adrenal gland measured 2.35 cm long x 0.5 cm at the cranial pole and 0.52 cm at the caudal pole.

Spleen

Spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). No focal nodules or masses are observed. Splenic vasculature appears normal.

Liver

Liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in

echotexture. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.

Gastrointestinal

The visible stomach wall is normal in thickness and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

The visible small intestines are normal in wall thickness and layering. Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

The visible colon is normal in wall thickness and layering. Contents are consistent with normal formed feces and gas.

Pancreas

The observed pancreas appears appropriately isoechoic to surrounding omental fat. Visible capsule is smooth and normal in contour. Visible pancreatic parenchyma is homogenous and unremarkable. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

Free Abdomen

There is no apparent lymphadenopathy. In the caudal right abdomen, adjacent/cranial to the urinary bladder, there is a focal area of enhanced hyperechoic mesenteric fat and a very scant amount of anechoic free fluid.

ULTRASONOGRAPHIC FINDINGS

- Flat adrenal glands – This can be a normal patient variant and/or a sign of exogenous cortisol administration. If exogenous steroids are not being administered, hypoadrenocorticism (either relative or absolute) should be considered.

- Right kidney pyelectasia – Differentials for pyelectasia include pyelonephritis, diuresis, congenital malformation or ureteral or lower urinary tract obstruction. The concurrently dilated ureter, that ends in an area of presumed inflammation, secondary to cryptorchid surgery in the right caudal abdomen, is concerning for at least partial ureteral obstruction, with differentials being an acute inflammatory post-op change vs potentially a stricture or even potentially a ligated ureter. Ureterolith vs other is possible but there is no visible evidence of such at this time.

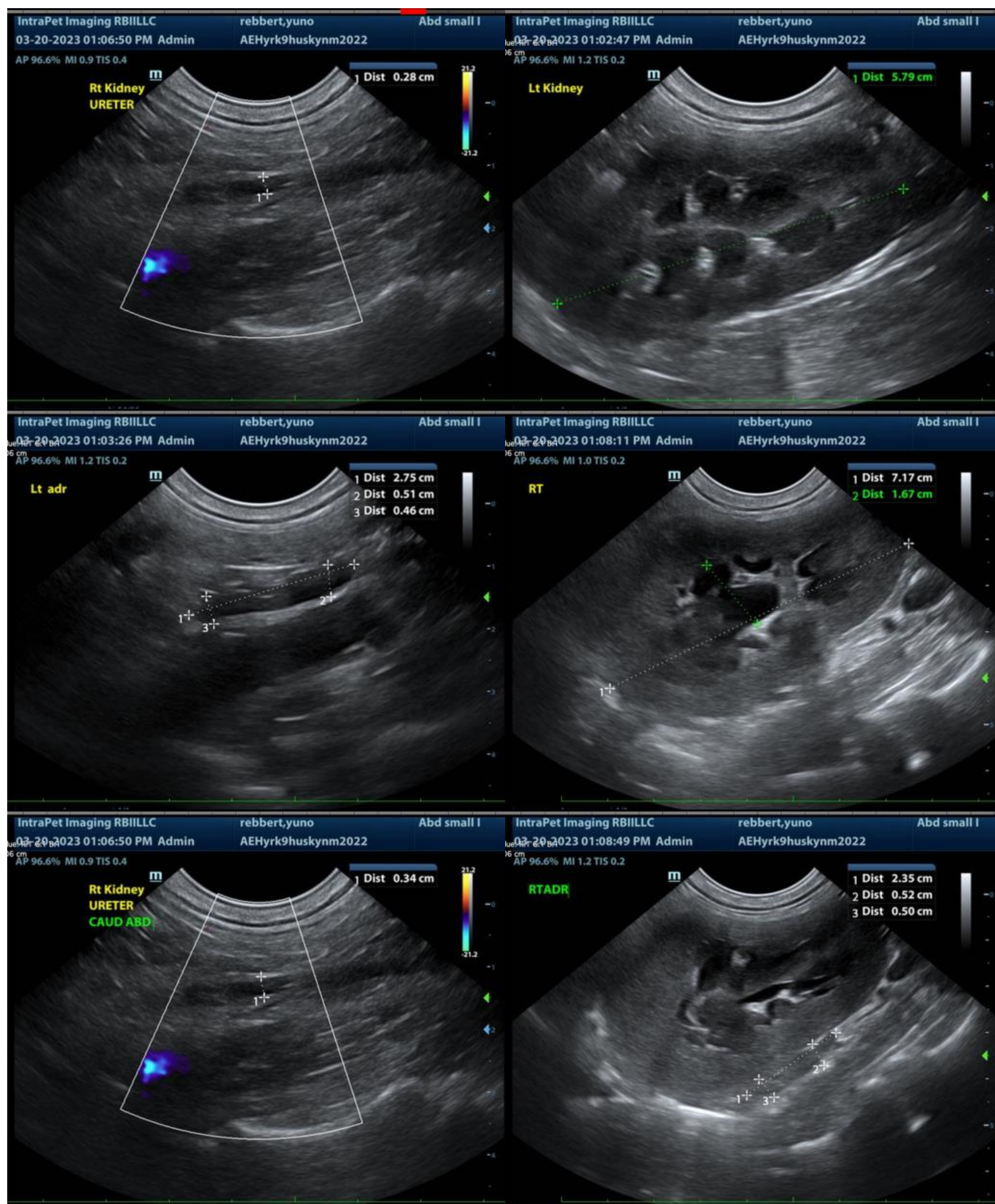
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

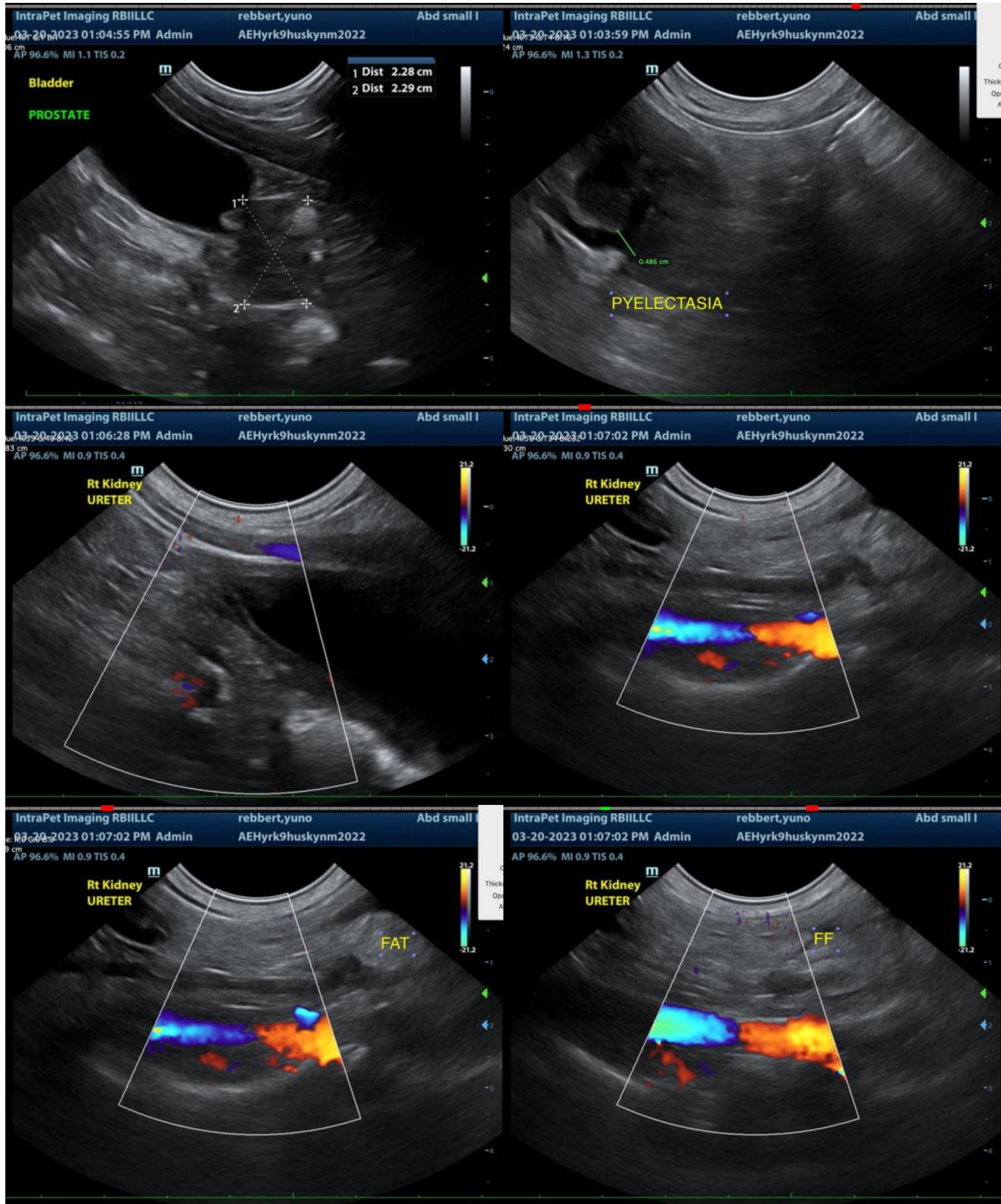
If not recently evaluated, a general metabolic health screen is recommended, including a CBC/chemistry panel, electrolytes, and urinalysis and, if indicated based on urinalysis results, urine culture is recommended. If protein is present in an otherwise quiet sediment, protein quantification with a urine protein to creatinine ration is recommended.

The gastrointestinal signs reported may be secondary to whatever is causing the pathology in the right ureter and right kidney, however, given the adrenal gland changes, etc., a baseline cortisol is recommended. If baseline cortisol is less than 2, a full ACTH stimulation test is recommended to rule out

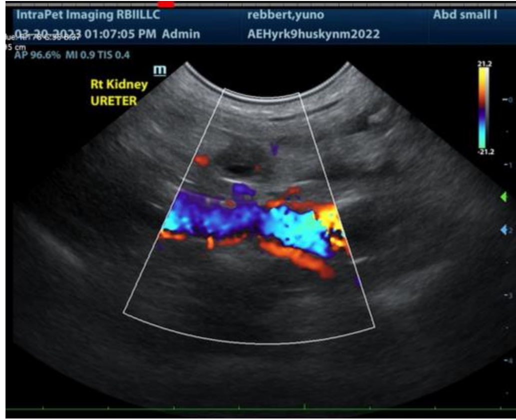
hypoadrenocorticism. A gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory is recommended for further evaluation of GI and pancreatic function.

It is impossible to determine (right now) if the suspected ureteral obstruction is a permanent change that will become progressive, such as a ligated ureter or a stricture, etc., or a transient change, as may be seen with post-op inflammation, or potentially, an infection, etc. Therefore, recommendations include either more advanced imaging, such as a contrast abdominal CT scan for further evaluation of the ureter, or supportive/symptomatic medical management of the acute clinical signs, potentially secondary infection, etc., with close monitoring of the right kidney and right ureter for resolution vs progression.





IntraPet Imaging RBIILLC
rebbert,yuno
Abd small I
03-20-2023 01:04:55 PM Admin
AEHyrk9huskynm2022
AP 96.6% MI 1.1 TIS 0.2
Bladder
PROSTATE
1 Dist 2.28 cm
2 Dist 2.29 cm
03-20-2023 01:03:59 PM Admin
AP 96.6% MI 1.3 TIS 0.2
0.486 cm
PYELECTASIA
03-20-2023 01:06:28 PM Admin
AP 96.6% MI 0.9 TIS 0.4
Rt Kidney
URETER
03-20-2023 01:07:02 PM Admin
FAT
FF



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.

Beth Johnson, DVM DACVIM
Beth.Johnson@SonoPath.com