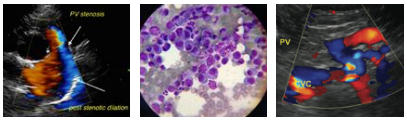
IMAGING PERFORMED BY

IntraPet.com



SonoPath

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DATE

5/5/2023

PATIENT

Bella Roth

SPECIES

Canine

BREED

Golden Retriever

SEX

Spayed Female

AGE

2/18/2013

WEIGHT

67.5lbs

INTERPRETED BY

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

HOSPITAL NAME

Bel Air Veterinary Hospital

REFERRING VET

Dr. Young

INVOICE

10200

PRESENTING CLINICAL SIGNS

Follow-up/re-check of pyelectasia, following acute on chronic renal disease and pyelonephritis. treatment.

Current Medications: Telmisarten 30mg PO SID started on 2/17/23, decreased to 15mg on 3/18/2023. Amlodipine 2.5 mg PO SID started on 3/20/23, Enrofloxacin 612 mg PO SID starting on 2/9/23 for 4 weeks based on initial and follow-up urine culture results.
Lab Results: 3/18/23: Creat - 3.2 mg/dL, BUN 81 mg/dL, Phos 7.1 mg/dL, K 6.2mmol/L
Urine Protein: Creatinine ratio 3.6 improved from 4.5 on 2/9/23.
Date of Previous IntraPet Ultrasound: 2/10/23. See attached.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Stephanie Warga RDCS, RVT.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

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.

The left kidney has a normal shape and size (6.51 cm) with pyelectasia at 0.29 cm. Overall echogenicity is slightly hyperechoic with poor 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 nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (5.65 cm) with pyelectasia at 0.5 cm. Overall echogenicity is slightly hyperechoic with poor 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 nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.69 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 large and irregular. The cranial pole measures at 1.26 cm and the caudal pole measures 0.57 cm and 2.75 cm in length. It is visualized between the right kidney and the caudal vena cava. It is irregular in appearance in that the cranial pole appears large and irregular with indistinct margins, measuring approximately 1.49 cm x 1.18 cm. No evidence of vascular invasion is visualized.

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 subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is homogenous echotexture. The visible portions of the vasculature and biliary tract appear normal. There are

occasional cystic regions in the left side of the liver. These measure 0.88 cm, 0.86 cm, and 0.79 cm in diameter (these are similar measurements to the scan performed 2/10/2023).

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.

Gastrointestinal

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.

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 jejunum measured as normal (0.39 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 formed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

Pancreas

The area of 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. There is no evidence of a significant lymphadenopathy. The sub-lumbar lymph node is measured at 0.76 cm in width. 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.

PRIMARY FINDINGS

- Decreased corticomedullary distinction in both kidneys with bilateral pyelectasia. Mild loss of corticomedullary distinction in both kidneys could be consistent with chronic degenerative disease or interstitial nephrosis. Pyelectasia of the kidney(s)could be consistent with pyelonephritis, chronic renal disease, secondary to PU/PD or fluid therapy (if applicable), other. These changes are similar to the previous scan 2/10/2023.

- Hypoechoic cystic lesions on the left side of the liver. These are most consistent with benign hepatic cysts and appear stable.

- 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.

- Irregular cranial pole of the right adrenal gland. Adrenomegaly could be consistent with neoplasia (e.g., adenoma, carcinoma, pheochromocytoma), hyperplasia, inflammation, other.

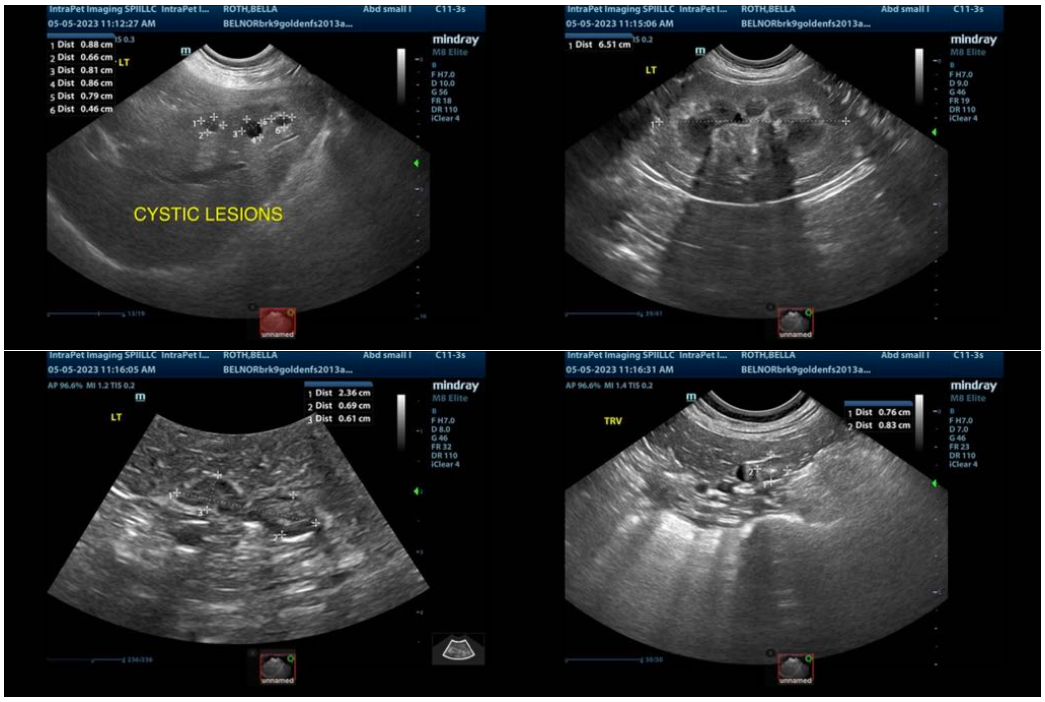
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

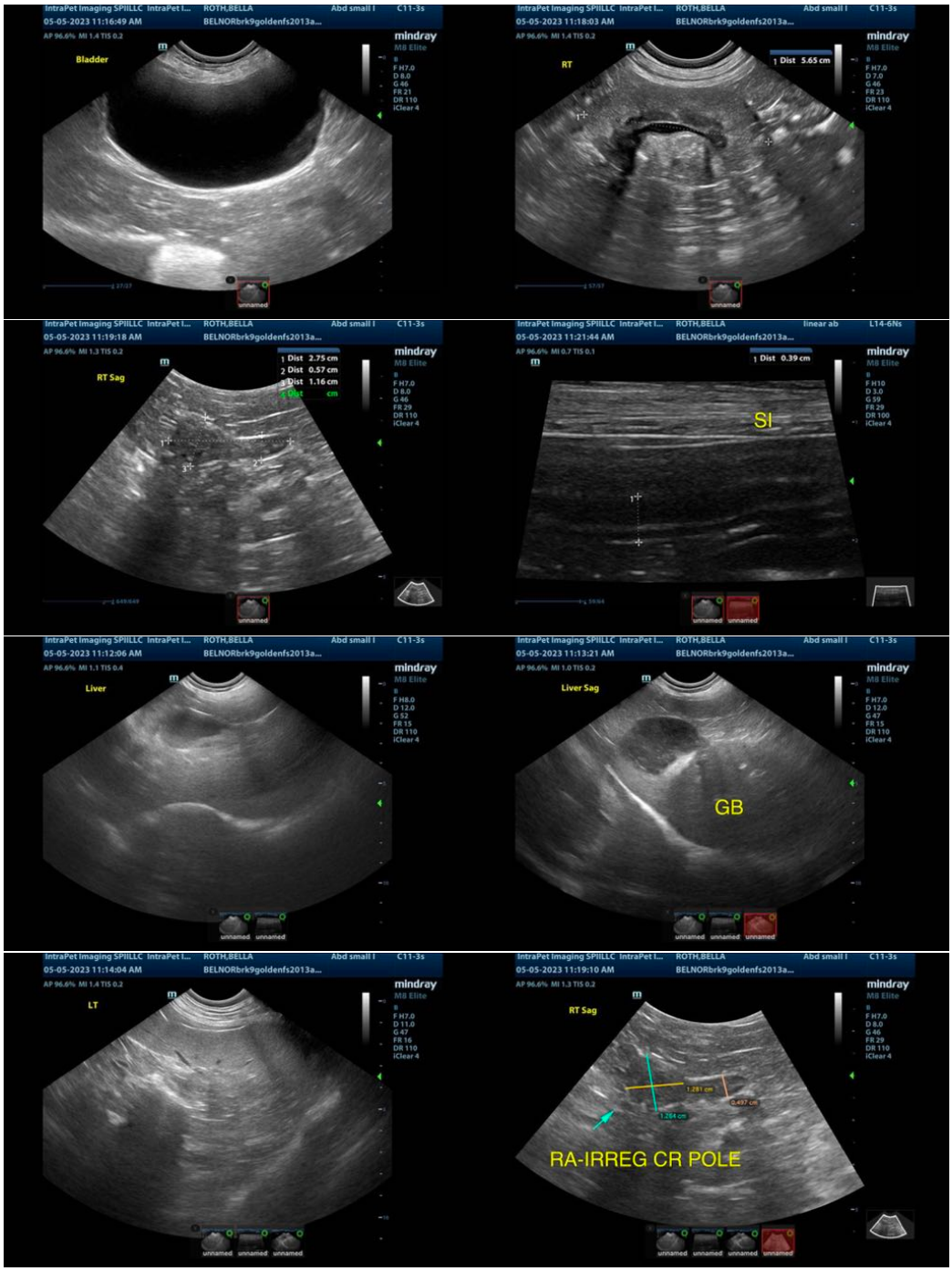
The changes observed associated with the kidneys and the liver appear stable from the previous scan. Often pyelectasia is permanent and will not resolve with resolution of the underlying cause. So, lack of resolution does not necessarily mean that the infection is not resolved. Correlate these findings with urinalysis and culture results.

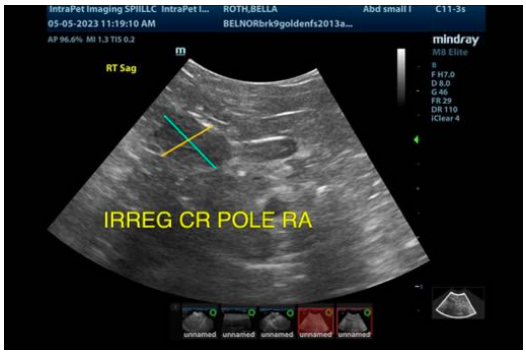
The cranial pole of the right adrenal appears irregular on today's scan (this lesion appears more prominent than in the previous scan 6 weeks ago). The significance of this is uncertain but there is concern that this is an early mass lesion. Recommend close continued monitoring. Consider a recheck ultrasound in 6-8 weeks. Alternately, if concern is high, you could consider a contrast CT scan to further evaluate this area. As will be the recommendation if this lesion changes at all in that time frame.

Additional recommendations would include a blood pressure evaluation. If hypertension is present, you could consider measuring catecholamine levels looking for possible pheochromocytoma, and if signs of Cushing's are present you could consider adrenal function testing. Although, this may be challenging to interpret in light of the concurrent renal disease present.

Recommend three view thoracic radiographs to evaluate for possible concurrent thoracic disease/involvement.




Bladder
RT
1 Dist 5.65 cm
RT Sag
1 Dist 2.75 cm
2 Dist 0.57 cm
3 Dist 1.16 cm
SI
1 Dist 0.39 cm
Liver
Liver Sag
GB
LT
RT Sag
1.281 cm
0.497 cm
1.264 cm
RA-IRREG CR POLE



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.

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