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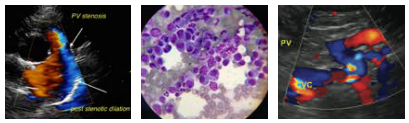

SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
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DATE
3/8/22

PATIENT
Sir Walter Riley Huber

SPECIES
Canine

BREED
Miniature Pinscher

SEX
Neutered male

AGE
3/30/12

WEIGHT
23.4 lbs

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

HOSPITAL NAME
Bel Air VH

REFERRING VET
Dr. Young

INVOICE
96634

PRESENTING CLINICAL SIGNS

Sir Walter Riley AKA Riley presented on 3/5/22 for anorexia, polydipsia, polyuria, and lethargy. Additionally, he had been squinting and seemed "spaced out". On physical examination Riley was quite, alert and responsive. He had normal vital parameters, moderate periodontal disease and a profound pot belly appearance.
Current Medications: Started 3/4/22- Entyce 30mg/mL 1.1mL SID, Ursodiol 250mg ½ SID, Denamarin Advanced ½ SID.
Lab Results: Chemistry - Glucose 158mg/dL, ALT 282 U/L, ALP 6927 U/L, GGT 88 U/L, Cholesterol 474 mg/dL, Lipase 5839 U/l, Chloride 108 mmol/L. Complete Blood Count - WBC 21.65 K/uL, Neutrophils 19.97 K/uL, Lymphocytes 0.92 K/uL, Eosinophils 0.01 K/uL. Urine dipstick - USG 1.004, Protein 3+, pH 6.5, blood trace. Full UA pending. LDDS test pending.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Stephanie Pearce 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 prostate is normal in size (1.0 cm) and shape for this neutered male dog. The parenchyma is homogenous and the external margins are smooth. The prostatic urethra appears normal with no evidence of irregularity, invasion, mass effect or calculi.

The left kidney has a normal shape and size (5.17 cm). Overall echogenicity is slightly hyperechoic with poor 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.

The right kidney has a normal shape and size (5.26 cm). Overall echogenicity is slightly hyperechoic with poor 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, but somewhat “plump” in appearance. The left adrenal measured 0.75 cm at the cranial pole and 0.62 cm at the caudal pole and 1.63 cm in length. 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, but “plump” in appearance. The right adrenal measured 0.75 cm at the cranial pole, 0.79 cm at the caudal pole and 0.58 cm in length. 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. The spleen echotexture is heterogenous and mottled, the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears

normal. There are numerous, ill-defined, subtle, hyperechoic foci within the splenic parenchyma. These lesions do not deviate the splenic capsule.

Liver

The liver is subjectively large in size with smooth peripheral margins. The parenchyma is hyperechoic and heterogenous in echotexture with subtle, indistinct focal mottling. The liver has rounded borders. 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 gallbladder is not thickened and has a smooth mucosal surface. There is a mild 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 duodenum measured as normal (0.3 cm) and the jejunum measured as normal (0.27 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 pancreas is large and hypoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is evidence of regional mesenteric inflammation. Consistent with mild pancreatitis.

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.

Heart

A brief view of the heart was submitted. No pericardial effusion was seen.

ULTRASONOGRAPHIC FINDINGS

PRIMARY FINDINGS:

- Bilaterally “plump” adrenal glands. The bilateral adrenomegaly could be consistent with bilateral hyperplasia (e.g., secondary to pituitary-dependent hyperadrenocorticism), bilateral infiltrative neoplasia, inflammatory adrenal disease, other. Correlation with clinical findings is recommended.

- Decreased corticomedullary distinction in both kidneys. Mild loss of corticomedullary distinction in both kidneys could be consistent with chronic degenerative disease or interstitial nephrosis.

- Large, hyperechoic, heterogenous liver. 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.

- Mottled prominent pancreas surrounded by mildly hyperechoic mesentery. The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.

- Mildly mottled spleen with ill-defined, hyperechoic foci. The diffuse splenic changes are non-specific and could be consistent with lymphoid hyperplasia, extramedullary hematopoiesis, infiltrative neoplasia, inflammation, other. Cytology or histopathology would be necessary to get a definitive diagnosis.

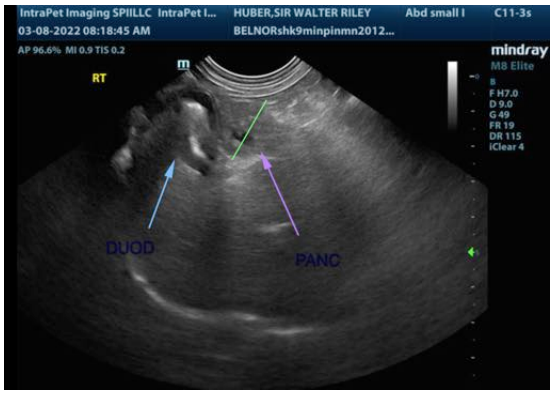
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

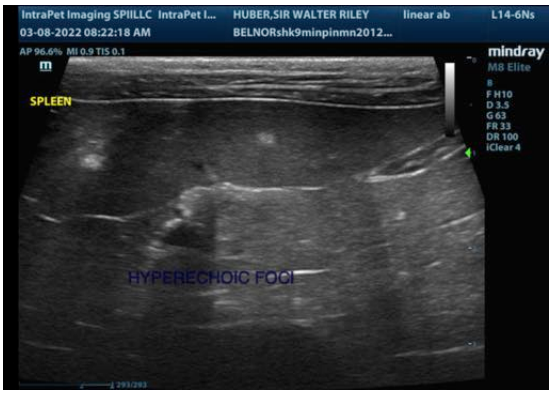
The changes on today's scan were somewhat subjective and non-specific. The adrenal glands were not overtly enlarged, but appeared plump and hypoechoic. This combined with the large, hyperechoic liver and the ALP elevation could be consistent with Cushing's disease, but the lethargy and anorexia would be atypical. Adrenal function testing may be recommended in the future, but ideally when the patient is feeling better.

The pancreas appears prominent and somewhat inflamed, consider a GI panel to Texas A&M for a qualitative PLI, TLI, cobalamin and folate to further evaluate for pancreatic inflammation and underlying gastrointestinal disease.

The changes observed in the spleen are relatively mild and non-specific. A FNA could be considered.

I recommend treatment for pancreatitis. Urinalysis and culture along with blood pressure evaluation is recommended.. You can consider pre and post prandial bile acids to evaluate liver function and three view thoracic radiographs to look for any evidence of concurrent intrathoracic disease.



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2 Dist 0.79 cm
3 Dist 0.75 cm
mindray
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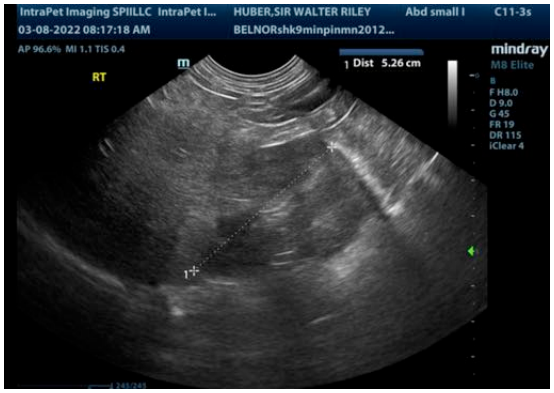
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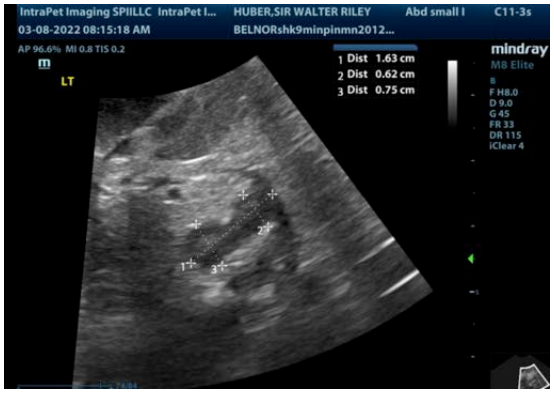
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3 Dist 0.75 cm
mindray
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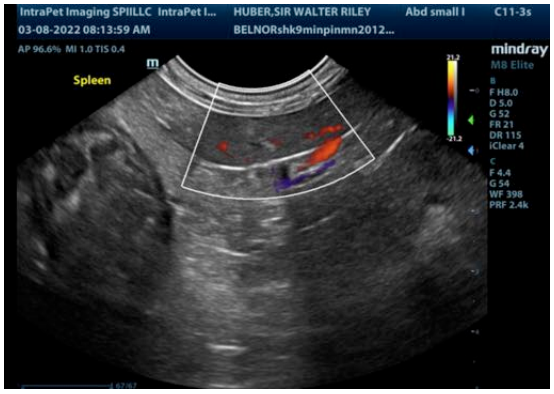
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mindray
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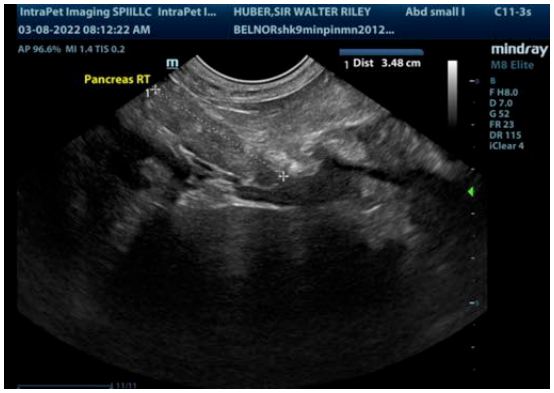

The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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