IMAGING PERFORMED BY

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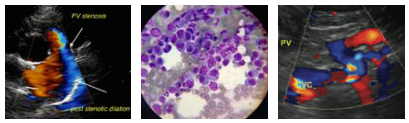

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DATE
2/22/22

PATIENT
Yari Ice

SPECIES
Canine

BREED
Cocker Spaniel

SEX
Neutered male

AGE
2/1/08

WEIGHT
25.3 lbs

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

HOSPITAL NAME
Chadwell AH

REFERRING VET
Dr. Gold

INVOICE
96228

PRESENTING CLINICAL SIGNS

History: Not eating.
Current Medications: Cerenia/Ampicillin.
Lab Results: Kidney values elevated.
Radiographs: See attached.
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 (1.1 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 (5.4 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 (5.6 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/borderline large in size measuring 0.86 cm at the cranial pole, 1.04 cm at the caudal pole and 2.86 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 large in size measuring 1.91 cm at the cranial pole and 0.99 cm at the caudal pole and 3.51 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 irregular in appearance and it is large and has a slightly moth eaten appearance in the cranial pole, which is enlarged. The findings are most consistent with a right-sided adrenal mass.

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 heterogenous in echotexture with subtle, indistinct focal mottling. 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 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 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 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/moderate 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.

ULTRASONOGRAPHIC FINDINGS

PRIMARY FINDINGS:

- Borderline bilateral adrenomegaly with a right sided adrenal mass. The adrenal glands are large in size for the size of the patient. Additionally the right adrenal gland is larger than the left and abnormal in appearance. Right adrenomegaly could be consistent with neoplasia (e.g., adenoma, carcinoma, pheochromocytoma), hyperplasia, inflammation, other.

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

- Hypoechoic prominent pancreas surrounded by hyperechoic mesentery with discomfort scanning the region. The pancreatic changes are most consistent with mild/moderate pancreatitis/pancreatic infiltration. I recommend fPLI testing and continued monitoring for improvement or possible development of a pancreatic abscess. Consider FNA if not improving.

- Large, 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.

- Large, gallbladder sludge. There is a large amount of primarily, non-organized, echogenic debris

present, but some debris towards the periphery has started to form some poorly defined strands that are consistent with early mucocele development. There is no evidence of bile duct dilation. This could represent an early mucocele, cholestasis, or may be secondary to fasting.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

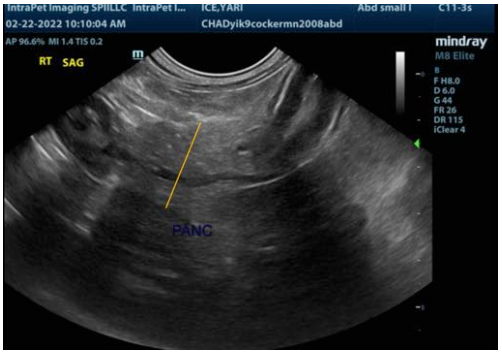
Both adrenal glands appear somewhat enlarged, but the right is larger and more irregular. Possible possibilities include bilateral adrenomegaly with an atypical appearance of the right adrenal gland due to uneven hyperplasia, etc. Alternately you can have PDH with a concurrent right sided adrenal mass effect. Given the current anorexia and illness this is likely not an optimal time to consider adrenal function testing, but if the patient is declining you can consider a contrast CT scan to further evaluate the adrenal glands. If the patient is starting to feel better and signs of Cushing's are present you can consider adrenal function testing. Additionally, you can then consider CT scan or advanced imaging to evaluate to try and determine if surgical intervention is needed. I recommend blood pressure evaluation and continue monitoring with ultrasound as some aggressive adrenal tumors can grow quickly and there is risk for acute hemorrhage from vascular invasion.

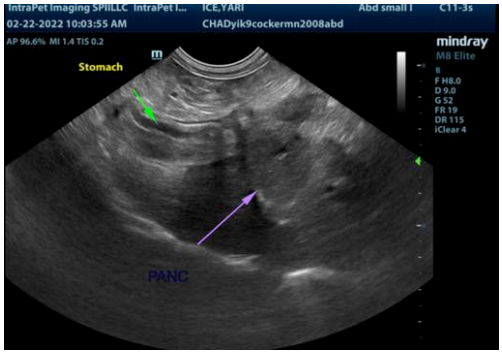
The kidneys have decreased corticomedullary distinction. This is most consistent with progressive age related change. Correlate these findings with urinalysis results to see if this is prerenal or renal azotemia.

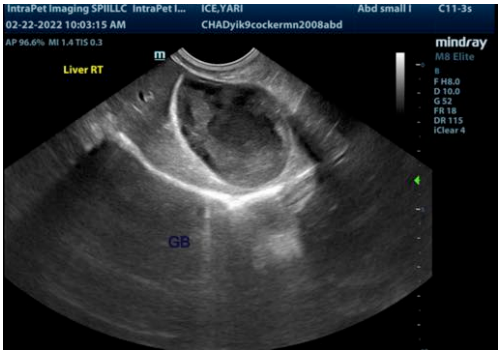
- Recommend urinalysis and culture.
- Recommend blood pressure evaluation.

The pancreas appears prominent and inflamed. This is most consistent with acute pancreatitis. Consider a quantitative PLI to further evaluate for this and consider supportive treatment for pancreatitis (IV fluids, pain medications, anti-nausea medications, etc.

I suspect the liver enzyme elevation could be secondary to the enlarged adrenal glands, pancreatitis, but additionally the gallbladder appears somewhat irregular and consistent with an early mucocele. Consider starting antibiotics and Ursodiol and continue monitoring of the gallbladder with ultrasound to look for possible progression of the biliary disease.



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AP 96.6% MI 1.4 TIS 0.3
mindray
M8 Elite
Liver RT
GB


IntraPet Imaging SPIILLC IntraPet I... ICE,YARI Abd small I C11-3s
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AP 96.6% MI 1.4 TIS 0.4
mindray
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Liver


IntraPet Imaging SPIILLC IntraPet I... ICE,YARI Abd small I C11-3s
02-22-2022 10:08:21 AM CHADyik9cockermn2008abd
AP 96.6% MI 1.2 TIS 0.2
mindray
M8 Elite
RT
1 Dist 3.51 cm
2 Dist 0.99 cm
3 Dist 1.91 cm
IRREG RA


IntraPet Imaging SPIILLC IntraPet I... ICE,YARI Abd small I C11-3s
02-22-2022 10:08:02 AM CHADyik9cockermn2008abd
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mindray
M8 Elite
RT
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IntraPet Imaging SPIILLC IntraPet I... ICE,YARI Abd small I C11-3s
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mindray
M8 Elite
prostate
1 Dist 1.91 cm


IntraPet Imaging SPIILLC IntraPet I... ICE,YARI Abd small I C11-3s
02-22-2022 10:06:34 AM CHADyik9cockermn2008abd
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mindray
M8 Elite
Bladder


IntraPet Imaging SPIILLC IntraPet I... ICE,YARI Abd small I C11-3s
02-22-2022 10:05:51 AM CHADyik9cockermn2008abd
AP 96.6% MI 1.1 TIS 0.2
mindray
M8 Elite
LT
1 Dist 2.86 cm
2 Dist 1.04 cm
3 Dist 0.86 cm
LA


IntraPet Imaging SPIILLC IntraPet I... ICE,YARI Abd small I C11-3s
02-22-2022 10:05:15 AM CHADyik9cockermn2008abd
AP 96.6% MI 1.4 TIS 0.2
mindray
M8 Elite
LT
1 Dist 5.64 cm

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.

Kathleen Sennello DVM,MS, Diplomate ACVIM (Small animal Internal Medicine)
kathleen.sennello@sonopath.com