IMAGING PERFORMED BY

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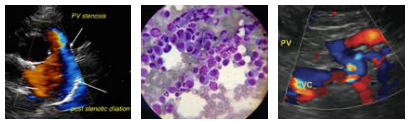

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DATE
2/11/22

PATIENT
Reese Stein

SPECIES
Canine

BREED
Welsh Terrier

SEX
Neutered male

AGE
1/6/06

WEIGHT
29 lbs

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

HOSPITAL NAME
Timonium AH

REFERRING VET
Dr. McMichael

INVOICE
96025

PRESENTING CLINICAL SIGNS

Acute onset down; panting. abdominal discomfort.
Current Medications: Gabapentin. Trilostane.
Lab Results: Pending.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Andi Parkinson, RDMS.

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 (XXcm) 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 (5.38 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.

The right kidney has a normal shape and size (4.5 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 large in size measuring 4.01 cm at the cranial pole, 3.2 cm at the caudal pole and 7.4 cm in length. It is hypoechoic and mottled. The left adrenal is in a relatively normal position, but deviates the left kidney and there is the suspicion of vascular invasion into the renal artery.

The right adrenal gland is large and measured 1.95 cm at the cranial pole, 1.2 cm at the caudal pole and 3.62 cm in length. It is in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is relatively normal in appearance, but is large and there is no evidence of surrounding fluid, inflammation or vascular invasion.

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 hypoechoic nodule visualized in the splenic parenchyma and measured 0.72 cm.

Liver

The liver is subjectively large 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 a 4.21 x 3.31 cm heterogenous, hypoechoic mass in the liver. 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 is moderately dilated with 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 large and hypoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is evidence of regional mesenteric inflammation. This is consistent with severe pancreatitis.

Free Abdomen

There is a small amount of free abdominal fluid. No lymphadenomegaly was noted. The omentum is severely inflamed in the cranial abdomen particularly around the pancreas and left adrenal mass.

Other

There is a small volume of pleural effusion seen cranial to the diaphragm.

ULTRASONOGRAPHIC FINDINGS

PRIMARY FINDINGS:

- Large left sided adrenal mass with possible vascular invasion. Left/right adrenomegaly could be consistent with neoplasia (e.g., adenoma, carcinoma, pheochromocytoma), hyperplasia, inflammation, other.

- Large, right adrenal. This could be consistent with hyperplasia due to concurrent pituitary dependent Cushing's disease.

- Hypoechoic nodule in the spleen. 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

- Large heterogenous liver with hypoechoic mass effect. 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 solitary mass effect could represent

metastasis, a primary mass or benign nodule.

- Hypoechoic, prominent pancreas surrounding by severely hyperechoic mesentery and free fluid. The pancreatic changes are most consistent with severe pancreatitis/pancreatic infiltration. I recommend fPLI testing and continued monitoring for improvement or possible development of a pancreatic abscess. Consider FNA if not improving.

- Free abdominal fluid and severely hyperechoic omentum. The diffusely hyperechoic mesentery and abdominal effusion are changes consistent with peritonitis (either infectious or inflammatory). Recommend fluid analysis and culture

- Small volume of pleural effusion

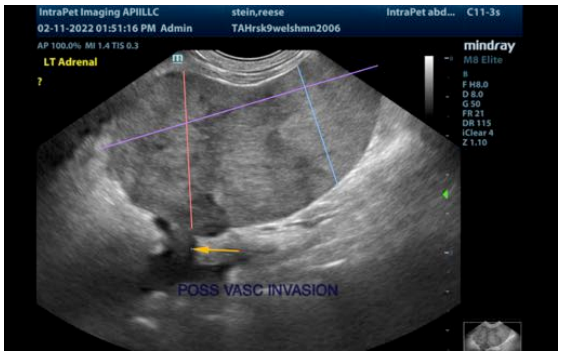
SECONDARY FINDINGS:

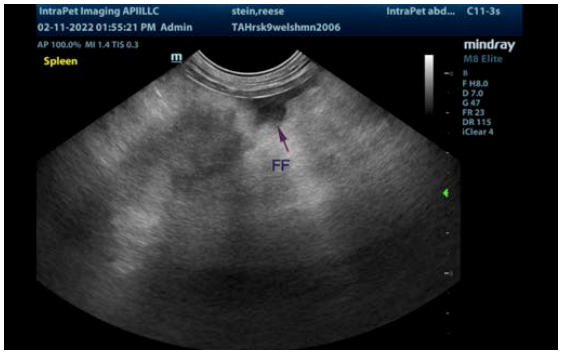
- Moderate gallbladder debris. The significance of the aggregated gallbladder debris is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting.

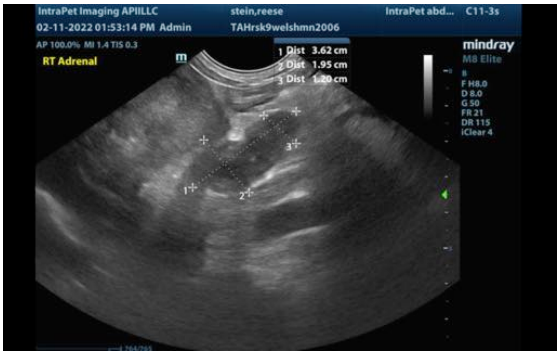
- Gastric lumen distended with shadowing ingesta.

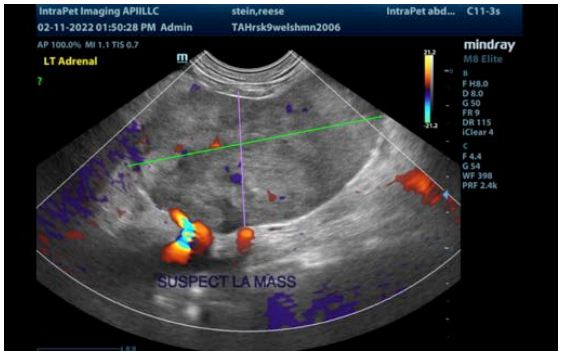
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

A large left adrenal mass was present as well as enlarged (but not nearly as large) right adrenal gland. I suspect this dog had both pituitary depending Cushing's and a left-sided adrenal mass, possibly a pheochromocytoma with the acute onset of symptoms and lack of free fluid to indicate a hemorrhage I would be suspicious for possible thromboembolic disease, a hypertensive crisis, shock, etc. Additionally the pancreas is severely hypoechoic and inflamed. This could be secondary to shock or could be necrotizing pancreatitis.









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.

Eric Lindquist, DMV, DABVP, Cert. IVUSS, CEO of SonoPath.com
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