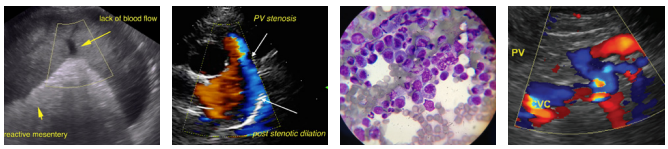
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



SonoPath.com™
1-800-838-4268 info@sonopath.com

PATIENT
Tiare Reinhardt

SPECIES
Canine

BREED
Yorkshire Terrier

SEX
Spayed Female

AGE
13 Years

WEIGHT
10.6 Pounds

INTERPRETED BY
Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY
Dr. Scott

HOSPITAL NAME
Ho Ho Kus VH

REFERRING VET
Dr. Scott

INVOICE
35878

DATE
3/3/22

PRESENTING CLINICAL SIGNS

Hx of diabetes and chronic pancreatitis. Was doing well but then became PU/PD. Increased insulin due to evidence of under regulation based on BG curve. Urine culture negative. Pet is currently on 7 units and is still PU/PD (so far curve today is looking better than previous- lowest BG is 189 and highest is high 200s). Eating well. Recently count a cutaneous MCT on cuadal thigh- about 0.75cm in diameter. Also recent proteinuria.
Abnormal PE/Chem/CBC/UA Results: Early Feb: BG 309, Creat 0.4, Na/K 26, CL 102, AST 60, ALP 625, GGT 14, Cholesterol 417 UA UPC 2.0, recheck UPC 2.3 Blood Pressure 200-220 mmHg chest rads clear

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is moderately 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.

The right kidney is normal in size (4.8 cm) and shape with smooth peripheral margination. A normal 1:3 cortex to medulla ratio is maintained. The medulla and cortices are uniform in texture with some mild increased echogenicity and mild loss of corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed. Multifocal small renal cortical cysts noted.

The left kidney is normal in size (4.6 cm) and shape with smooth peripheral margination. A normal 1:3 cortex to medulla ratio is maintained. The medulla and cortices are uniform in texture with some mild increased echogenicity and mild loss of corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed. Multifocal small renal cortical cysts noted.

Adrenal Glands

The right adrenal gland is normal in size (0.9 cm at the cranial pole and 0.70 cm at the caudal pole), and plump in shape. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

The left adrenal gland is normal in size (0.65 cm at the cranial pole and 0.60 cm at the caudal pole), and plump in shape. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

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). Multifocal well-demarcated hyperechoic homogenous nodules are present. Splenic vasculature appears normal.

Liver

The 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. A 2.0 cm round, homogenous, hyperechoic nodule is noted in the left caudal liver. Visible vasculature and biliary tree appear normal without distension or congestion.

The 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.

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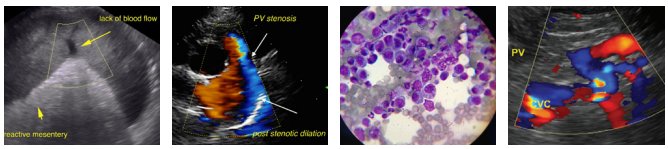

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Gastrointestinal

The stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) and layering. The lumen of the stomach is mildly distended with echogenic non-shadowing luminal contents and gas consistent with normal ingesta. There is 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 (canine duodenum < 0.5 cm and feline duodenum < 0.4 cm; other < 0.3 cm). 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 (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

Pancreas

The pancreatic parenchyma is appropriately isoechoic to surrounding tissue. Visible capsule is smooth and normal in contour. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

Free Abdomen

There is no evidence of peritoneal effusion. There is no apparent lymphadenopathy.

PRIMARY FINDINGS

- Bilateral adrenomegaly – consistent with adrenal hyperplasia secondary to pituitary depending hyperadrenocorticism vs normal variant.
- Well-defined, hyperechoic liver nodule – Differentials include nodular hyperplasia versus well differentiated primary hepatic neoplasia. Metastatic neoplasia is possible but considered less likely.

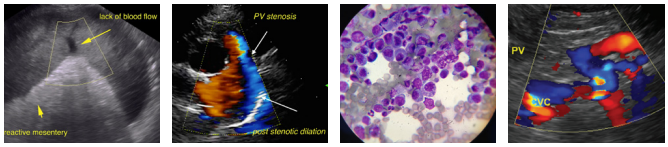
SECONDARY FINDINGS

- Age related kidney change – This finding is expected/consistent with age-related mild degenerative disease and should be interpreted clinically in combination with laboratory changes.
- Bilateral renal cortical cysts
- Hyperechoic splenic nodules – most consistent with benign myelolipomas. Other differentials such as fibrosis or calcification caused by old hematomas or infarcts, chronic inflammation, granulomatous disease or metastatic disease cannot be ruled out, but are less likely.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Given this patient's history of PU/PD despite well regulated diabetes and combined with adrenomegaly, it is considered feasible that the mild proteinuria, the hypertension, as well as the PU/PD are all secondary to hyperadrenocorticism, in this case likely pituitary dependent hyperadrenocorticism, and a low-dose Dexamethasone suppression test is recommended.

In the meantime, management of the hypertension with Amlodipine is recommended. However close monitoring of the hypertension after management of hyperadrenocorticism is recommended in case the need for treatment resolves after managing hyperadrenocorticism. Proteinuria should also be



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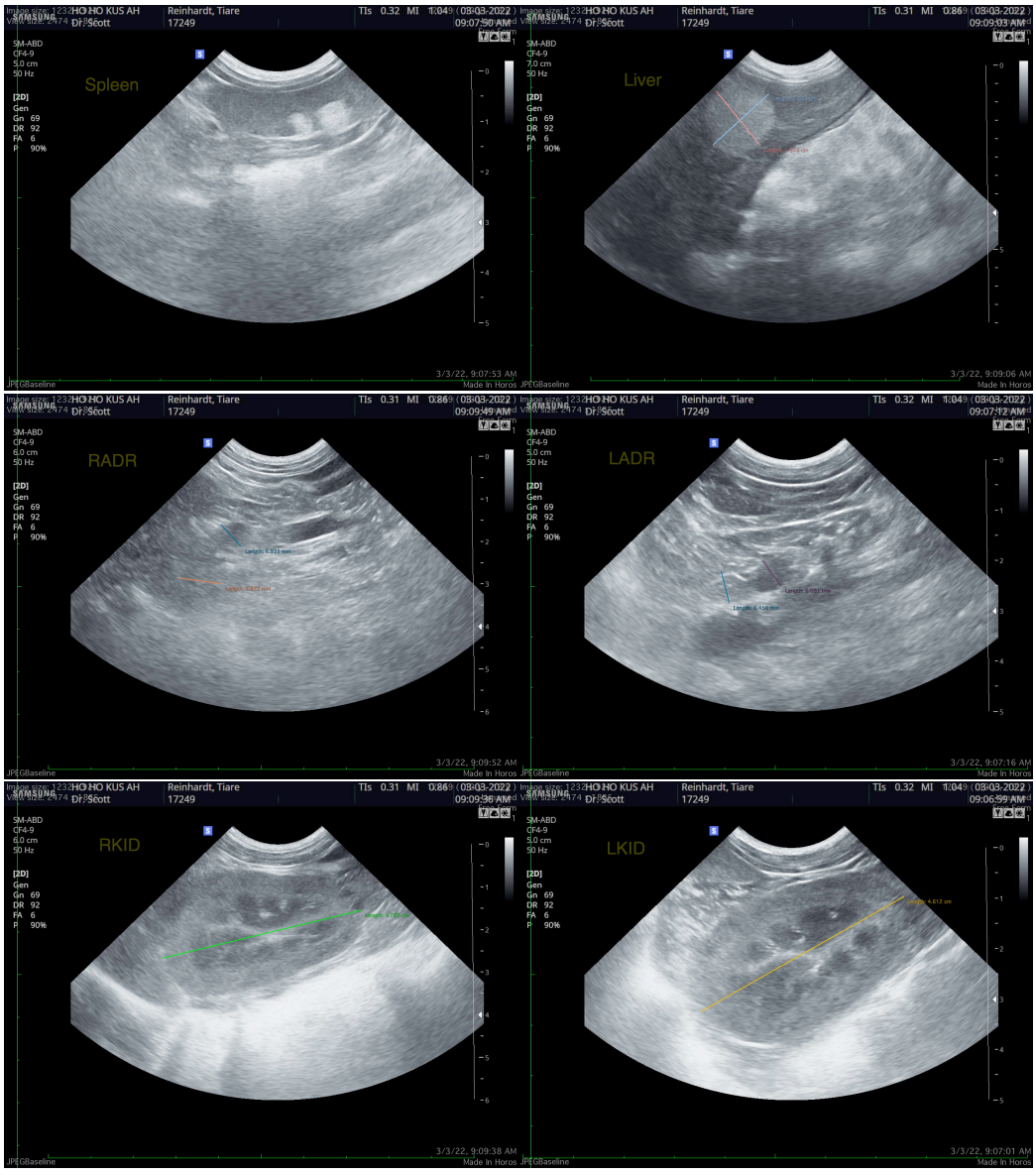
reassessed, as after managing hypertension and managing hyperadrenocorticism, the protein may not require further medical intervention.

A fine needle aspirate of the liver nodule is recommended if patient's coagulation status is appropriate. Surgery for removal of the mast cell tumor (as is reportedly planned) is recommended. There is some benefit to removing the mast cell tumor immediately to prevent or minimize potential spread/metastasis, etc. However, arguably, healing may be better after management of suspected hyperadrenocorticism. Therefore, timing is more of a clinical and owner directed decision versus a medical necessity either way.



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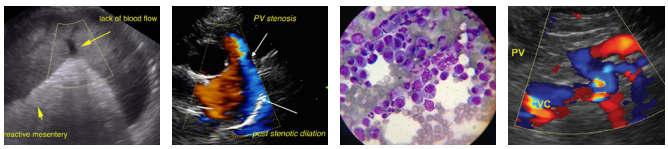

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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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