

**DATE**

3-11-22

PRESENTING CLINICAL SIGNS

Elevated liver values. ALT and ALKP have increased over the last couple months. Has seizures.

PATIENT

Peanut Collins

Current Medications: Denamarin Large dog 1 SID, Gabapentin 200mg in am, 100mg midday and 100mg PM. Keppra 500mg in AM, 250mg midday and 500mg PM.

SPECIES

Canine

Lab Results: See attached.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

BREED

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Imaging Performed By: Stephanie Pearce RDCS, RVT.

SEX

FS

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**AGE**

3/11/11

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.

WEIGHT

40.6 lbs.

The left kidney is normal in size 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. An incidental cortical cyst in the left kidney is noted. Mild pyelectasia was noted in the left kidney, measuring 0.12 cm in the transverse view. There is no evidence of mineral or infarcts observed. The left kidney measured 5.74 cm.

INTERPRETED BY

Beth Johnson, DVM,
DACVIM

The right kidney is normal in size 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. The right kidney measured 6.53 cm.

HOSPITAL NAME

Animal Care Center

Adrenal Glands**REFERRING VET**

Dr. Anderson

The right adrenal gland is normal in size with a plump appearance (2.44 cm long x 0.66 cm at the cranial pole and 0.68 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

INVOICE

13476

The left adrenal gland is normal in size with a plump appearance (2.7 cm long x 0.82 cm at the cranial pole and 0.82 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

Spleen

The 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). A hypo to anechoic, non-capsule disrupting nodule measuring 0.8 cm x 0.4 cm was noted. Splenic vasculature appears normal.

Liver

Liver is subjectively enlarged with rounded margins. Parenchyma is heterogenous characterized by multiple poorly defined hypoechoic nodules within otherwise hyperechoic liver parenchyma. Visible vasculature appears normal.

GB is moderately distended with anechoic bile and gravity dependent echogenic sediment. The wall is smooth without visible thickening. There is no evidence of cystic or CBD dilation. There is no evidence of effusion or inflammation.

Gastrointestinal

The stomach wall is normal in thickness (< 0.5 cm) and layering. The lumen of the stomach is empty with 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

No appreciable lymphadenopathy or free fluid was noted in these images.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Bilateral adrenomegaly – consistent with adrenal hyperplasia secondary to pituitary depending hyperadrenocorticism vs normal variant.
- Heterogenous liver – Differentials for hepatic changes include both benign steroid (vacuolar) hepatopathy or extramedullary hematopoiesis as well as infiltrative round cell or metastatic neoplasia.
- Canine Gallbladder debris - Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness. Cholecystic debris is not necessarily related to hepatobiliary disease. Echogenic bile is most commonly an incidental finding in dogs and should

be interpreted in combination with clinical signs such as nausea, inappetence, cranial abdominal discomfort and/or laboratory changes such as increased ALP and/or increased Tbili.

Secondary Findings

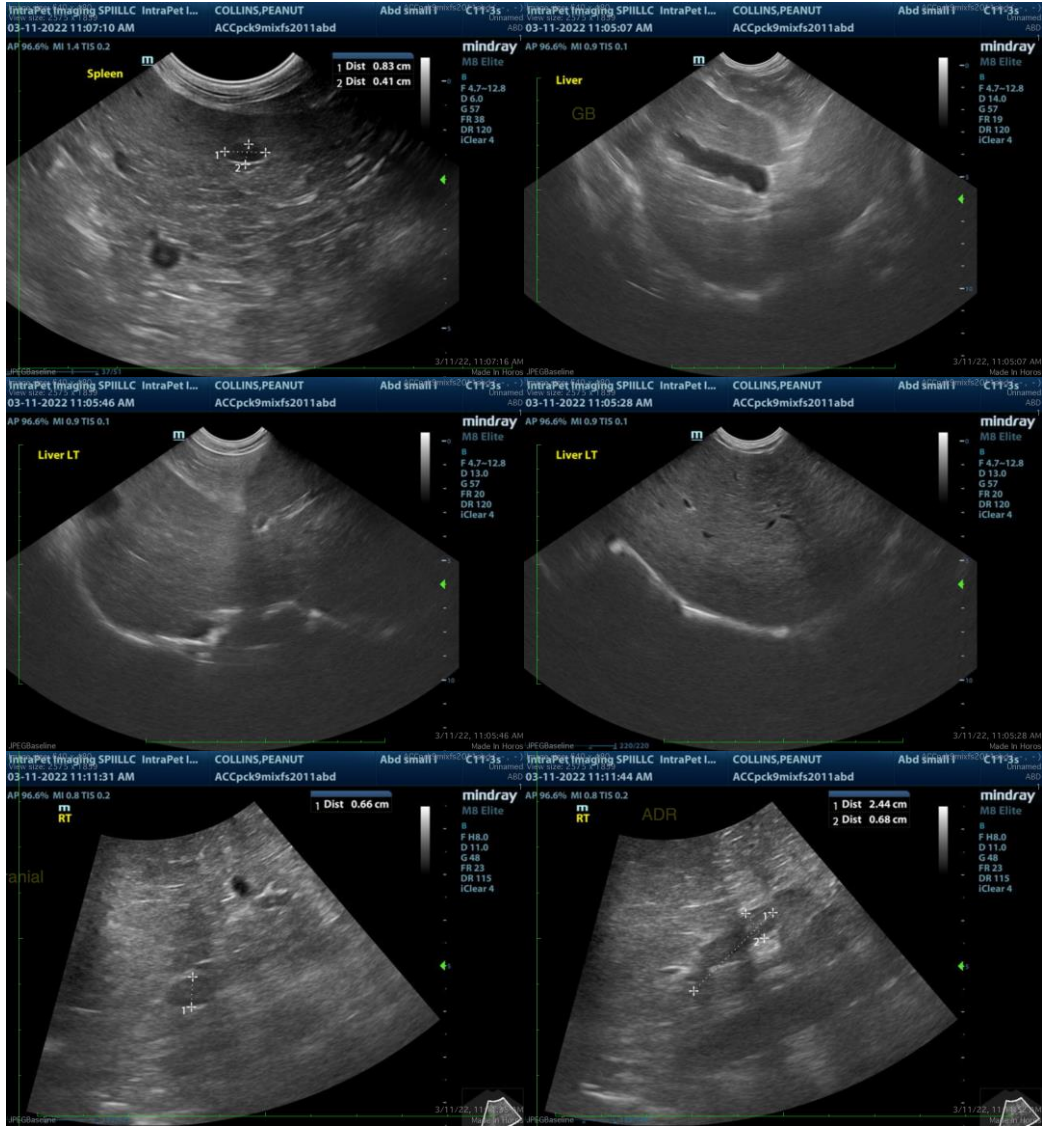
- Splenic nodule - most consistent with a benign cyst, hematoma, nodular hyperplasia or extramedullary hematopoiesis. Infiltrative neoplasia can mimic benign lesions and is possible, but considered less likely.
- Age related kidney change with mild pyelectasia in the left kidney and an incidental cortical cyst in the left kidney – This finding is expected/consistent with age-related mild degenerative disease and should be interpreted clinically in combination with laboratory changes.

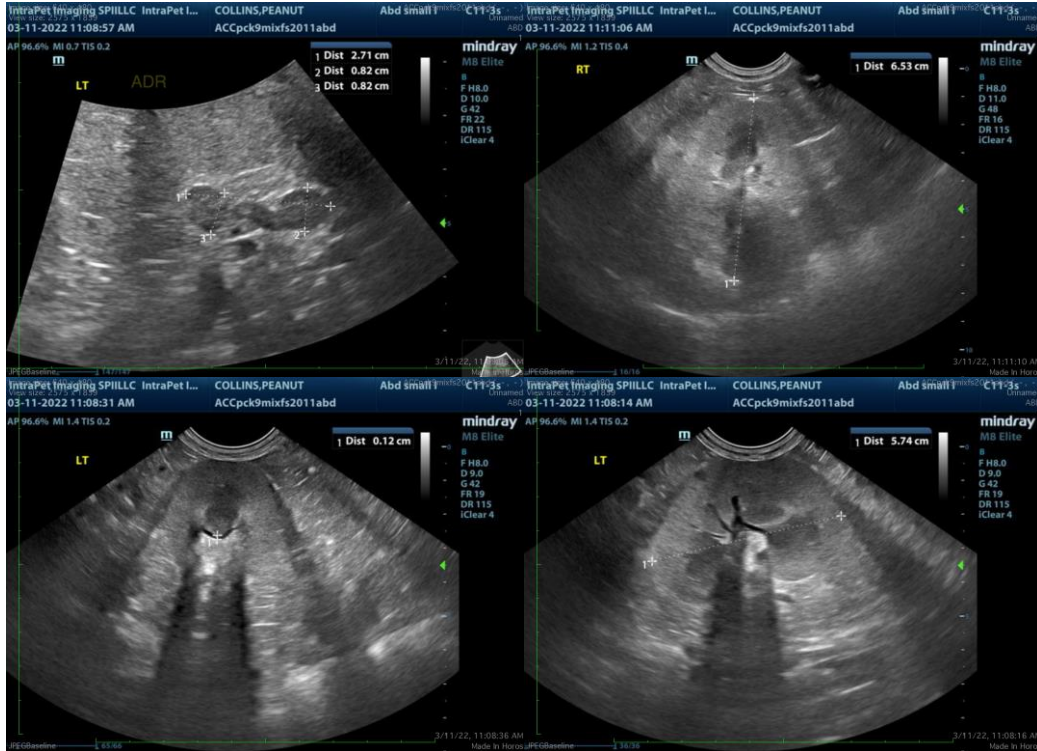
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

If this patient has clinical signs of hyperadrenocorticism including polyuria / polydipsia /polyphagia, panting, etc., testing for hyperadrenocorticism in the form of a low-dose Dexamethasone suppression test is recommended. If hyperadrenocorticism is diagnosed, it's likely pituitary-dependent based on these images.

If hyperadrenocorticism is not diagnosed as a potential cause for the liver enzyme changes, a fine needle aspirate of the liver is recommended, if the patient's coagulation status is appropriate and given the mild gallbladder debris, empirical therapy with antibiotics and Ursodiol, with monitoring of liver enzymes, could be considered.

Monitoring of the splenic nodule is recommended with recheck ultrasound in 4-6 weeks to rule out progression.





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

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