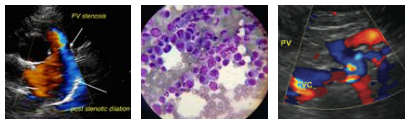
IMAGING PERFORMED BY

IntraPet.com



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DATE
6/6/22

PATIENT
Yip Gutjahr

SPECIES
Canine

BREED
Miniature Schnauzer

SEX
Neutered male

AGE
7/19/09

WEIGHT
19 lbs

INTERPRETED BY
Beth Johnson, DVM DACVIM

HOSPITAL NAME
Lake Shore Pet Hospital

REFERRING VET
Dr. Ashley

INVOICE
30864

PRESENTING CLINICAL SIGNS

History of ALT and ALP; concern for Cushing's disease; mildly enlarged spleen according to AAVEC.
Current Medications: None listed.
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

Urinary bladder is moderately distended with anechoic contents. It has normal uniform wall thickness (< 0.2 cm). No masses or cystoliths are observed.

The prostate is normal for a neutered dog.

Left kidney is normal in size (5.4 cm), shape and echogenicity. It has smooth peripheral margination and appropriate corticomedullary distinction. There is no pyelectasia noted. No mineral is observed.

Right kidney is normal in size (4.66 cm), shape and echogenicity. It has smooth peripheral margination and appropriate corticomedullary distinction. There is no pyelectasia noted. No mineral is observed.

Adrenal Glands

The left adrenal gland is normal in size, yet plump in appearance (1.64 cm long, 0.45 cm at cranial pole and 0.52 cm at caudal pole). Normal shape and contour are maintained. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

The right gland is normal in size, yet plump in appearance (2.09 cm long, 0.66 cm at cranial pole and 0.48 cm at caudal pole). Normal shape and contour are maintained. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

Spleen

Spleen is subjectively normal in size with normal smooth margins. Parenchyma is normal in echogenicity and echotexture. There were multifocal well-demarcated hyperechoic homogenous nodules. 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 visible gastric wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm). The stomach lumen is mildly distended with very echogenic reverberation artifact from intraluminal gas. There is no evidence of obstruction, foreign material or infiltrative disease; however, complete visualization of far wall is partially inhibited by gas. Pyloric outflow tract appears patent.

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The small intestines are normal in wall thickness and layering. Small intestinal motility appears adequate (1-3 contractions per min). There are no luminal contents noted within small intestines.

Colon is normal in wall thickness (< 0.2 cm) and layering.

Pancreas

The right limb of the pancreas is diffusely prominent and hypoechoic in appearance compared to surrounding tissue. The pancreas is mildly coarse in echotexture. There is no evidence of enhanced, peri-pancreatic tissue and/or free fluid.

Free Abdomen

Lymph nodes are normal with no observed enlargement. No free fluid is 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.
- 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:

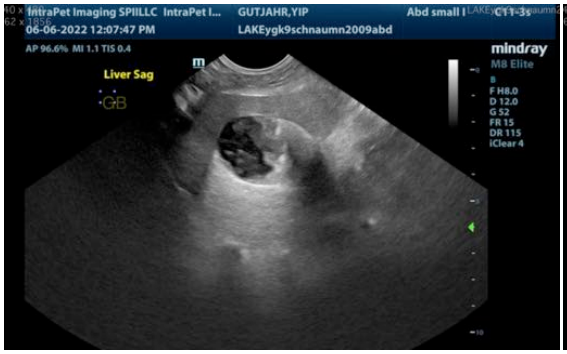
- Hyperechoic splenic nodules – most consistent with benign myelolipomas. Other differentials such as fibrosis or calcification caused by old hematomas or infarcts, chronic inflammation, granulomatous disease or metastatic disease cannot be ruled out, but are less likely.
- Mildly prominent hypoechoic pancreas. Rule out normal variant versus mild, chronic smoldering pancreatitis.

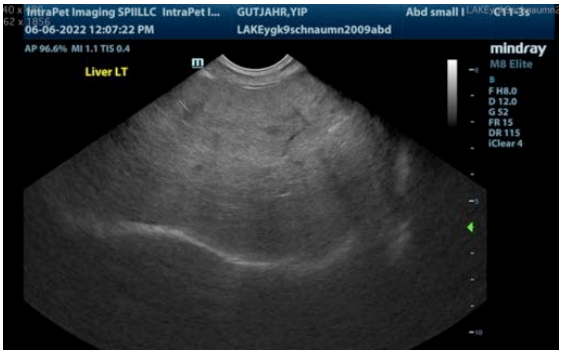
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

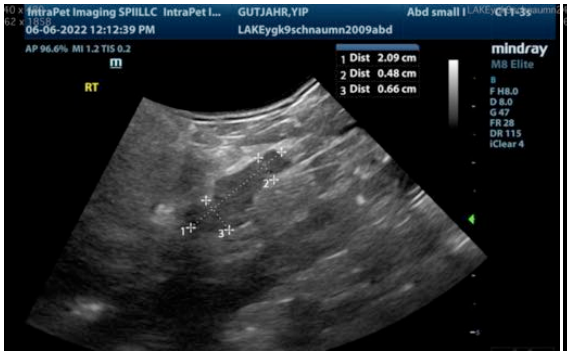
The combination of ultrasound findings are most consistent with hyperadrenocorticism, pituitary dependent.
Recommendations:

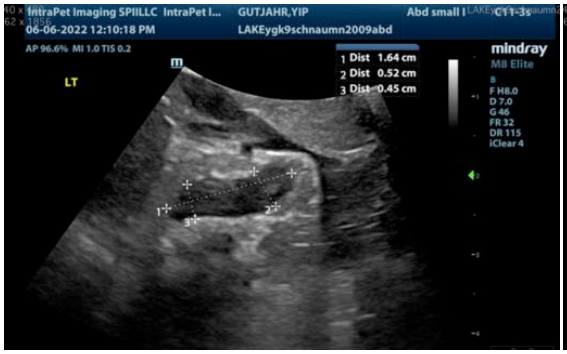
1. Urinalysis and if indicated based on urinalysis results urine culture. If there is protien in the urine, but an otherwise quiet sediment a protein to creatinine ratio is recommended.

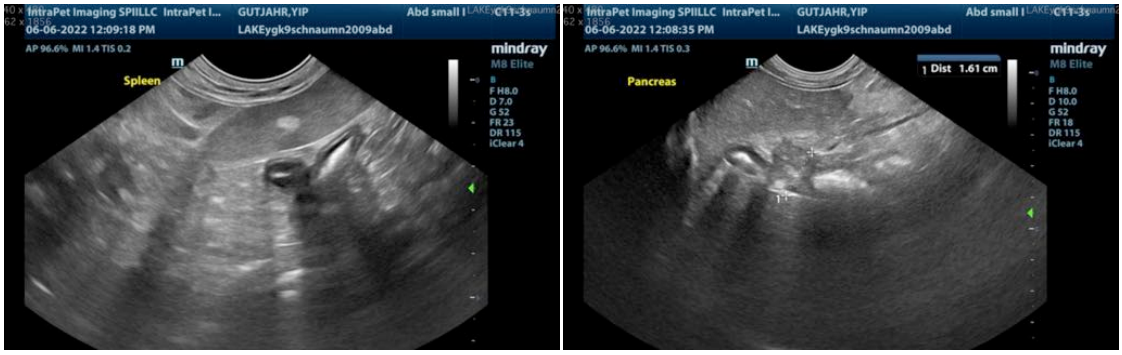
2. Blood pressure is recommended if not recently evaluated.
3. If clinical signs of hyperadrenocorticism are present such as PU/PD, polyphagia, etc. combined with the reported increased liver enzymes as well as dilute urine, proteinuria, and/or hypertension testing for hypoadrenocorticism in the form of low-dose Dexamethasone suppression test is recommended.
4. If clinical signs of hyperadrenocorticism are not present then I recommend monitoring of the patient for the potential development of clinical signs at which time testing for hyperadrenocorticism can be considered.











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.

Beth Johnson, DVM DACVIM

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