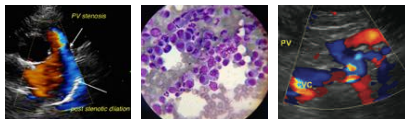
IMAGING PERFORMED BY

IntraPet.com



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
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DATE
2/14/22

PATIENT
Nike Hector

SPECIES
Canine

BREED
Shiba Inu

SEX
Spayed Female

AGE
11/4/08

WEIGHT
28.5 lbs

INTERPRETED BY
Beth Johnson, DVM DACVIM

HOSPITAL NAME
Happy Tails VH

REFERRING VET
Dr. Calpeno

INVOICE
96051

PRESENTING CLINICAL SIGNS

History: recent labs indicate kidney changes; recent GI episodes including decreased appetite and nausea.
Current Medications: Royal Canin renal diet dry & wet, Dasuquin 1 chew sid; Krillex 1/4T bid; Antronex 1T bid; Boswelia 1T tid; Adequan 50 units monthly; Perio support 1/2tsp bid; lactoquil 1 chew sid; cerenia 60mg 1/2T sid PRN.
Lab Results: elevated creat r/o secondary to dehydration vs early renal or other - persistently w/slight changes; not completely concentrating urine - dilution vs actual renal vs endocrine. Attached separately.
Date of Previous IntraPet Ultrasound: No previous IntraPet scans.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Rachel Brilhart, RDMS.

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.

Left kidney is normal in size (4.09 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 (3.86 cm), shape and echogenicity. It has smooth peripheral margination and appropriate corticomedullary distinction. Renal pelvis is dilated (pyelectasia), measuring (0.34 cm). No visible obstruction is observed, but cannot be ruled out. No mineral is observed.

Adrenal Glands

Adrenal glands are mildly plump in appearance (left adrenal gland measured 2.25 cm long x 0.55 cm at the cranial pole and 0.84 cm at the caudal pole and the right adrenal measured 1.33 cm long, 0.61 cm at cranial pole and 0.64 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. Multifocal well-demarcated hyperechoic homogenous splenic nodules are noted. Splenic vasculature appears normal.

Liver

Liver is subjectively enlarged. Margins are smooth but round. It has a normal homogenous echotexture. Parenchyma is diffusely hyperechoic characterized by less prominent than normal portal vein walls and increased echogenicity relative to the spleen. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion. 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 is empty.

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
Pancreas has normal homogenous echotexture and is normal in echogenicity and smooth margination. There is no evidence of peripancreatic inflammation.

Free Abdomen
Lymph nodes are normal with no observed enlargement.

ULTRASONOGRAPHIC 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.

Pyelectasia in the right kidney – Differentials for pyelectasia include pyelonephritis, diuresis, congenital malformation or ureteral or lower urinary tract obstruction.

Bilateral adrenomegaly – consistent with adrenal hyperplasia secondary to pituitary depending hyperadrenocorticism vs normal variant.

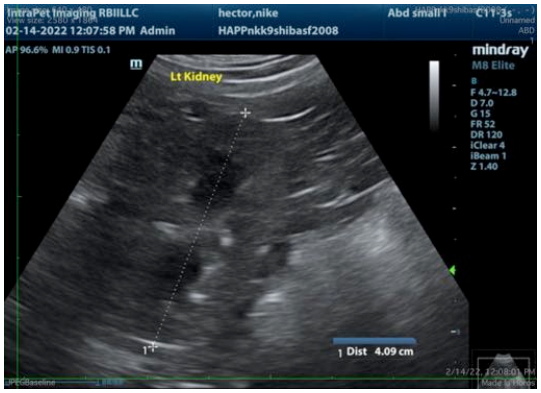
Hyperechoic splenic nodules – most consistent with benign myelolipomas. Other differentials such as fibrosis or calcification caused by old hematomas or infarcts, chronic inflammation, granulomatous disease or metastatic disease cannot be ruled out, but are less likely.

Hyperechoic hepatomegaly canine – most consistent with benign steroid (endocrine) hepatopathy or reactive or idiopathic hepatopathy. Infiltrative neoplasia such as round cell neoplasia is also possible, but considered less likely.

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.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS
Recommendations include a urine culture if not recently evaluated given the history of mild azotemia and pyelectasia in the right kidney. If this patient has clinical signs of hyperadrenocorticism including polyuria, polydipsia, polyphagia, panting, pot belly, etc. testing for hyperadrenocorticism with a low-dose Dexamethasone suppression test could be considered. However, the adrenal changes are likely normal patient variant if there are not clinical signs of hyperadrenocorticism.

Given the gastrointestinal signs a FNA of the liver can be considered if the patient's coagulation status is appropriate. Medical management for possible cholangitis/gallbladder debris can be considered with broad spectrum antibiotics and Ursodiol as the level of azotemia reported combined with the ultrasonographic changes of the kidneys do not definitively explain the clinical signs. If another underlying cause is not determined then further empirical therapy of the chronic kidney disease could include antiemetics, gastroprotectants +/- appetite stimulants as well as subcutaneous fluid therapy if fluid therapy use on a trial and error basis seems to improve appetite.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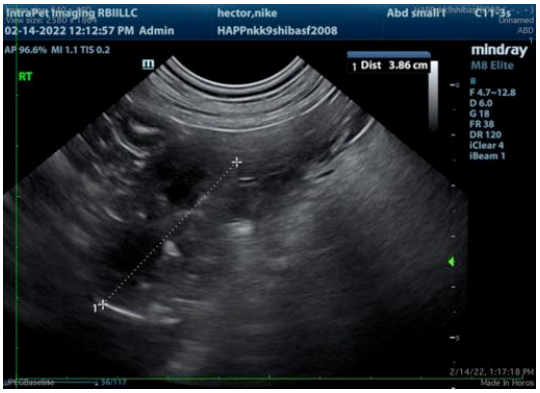
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IntraPet Imaging RBIILLC
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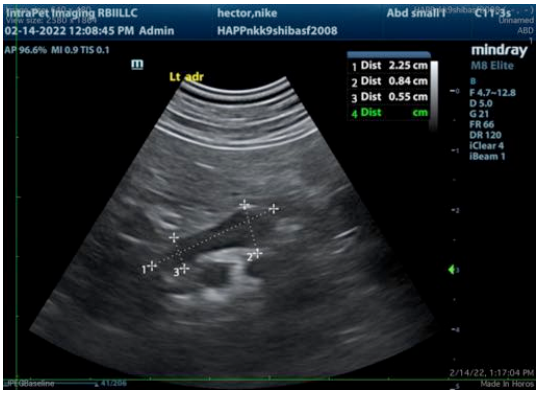
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mindray
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Lt adr
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3 Dist 0.55 cm
4 Dist cm
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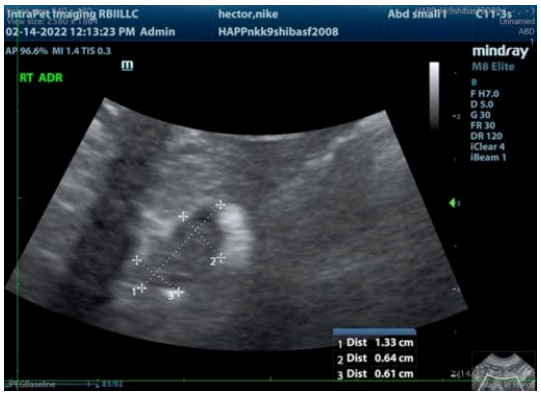
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hector,nike
Abd small I
C11-3s
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HAPPnkk9shibasf2008
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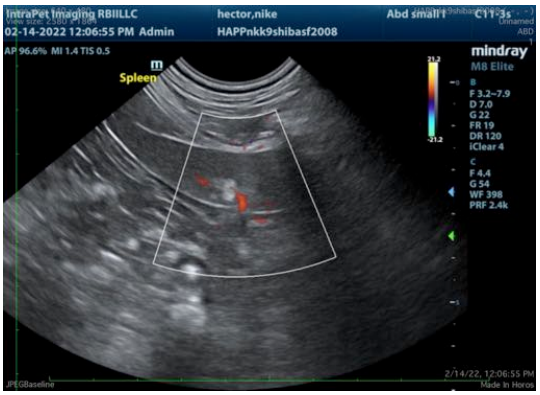
mindray
M8 Elite
RT ADR
1 Dist 1.33 cm
2 Dist 0.64 cm
3 Dist 0.61 cm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mindray
M8 Elite
Spleen
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The information and recommendations provided are based on the images presented by the referring veterinarian. 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

Beth.Johnson@SonoPath.com