

**DATE**

2/14/22

PRESENTING CLINICAL SIGNS

History: Chronic weight loss. History of hypercalcemia. Ultrasounded last March with no obvious cause for weight loss or hypercalcemia. Pet was started on prednisolone as palliative but discontinued a few months ago.

PATIENT

Rex Haramoto

1/6/22. Presented for a general check-up. Full labs sent and borderline hyperthyroid disease diagnosed but pet also had significant neutrophilia. Pet started on methimazole and received 2-week course of Clavamox as broad-spectrum treatment. 2/10/22 recheck exam and labs, pet doing well per owner with weight gain but neutrophilia worsened with new

SPECIES

Feline

azotemia, thyroid only gradually improved and new hypoglycemia repeatable. 2/11/22 pet was hospitalized for BG monitoring, IVF diuresis for kidney disease and broad-spectrum antibiotic treatment.

BREED

Domestic Shorthair

Current Medications: torb 0.2 mg/kg 0.08 ml IV, gabapentin 50-100 mg PO.

Lab Results: 2/11/22: BG 52, 64, insulin/glucose level PENDING, 2/10/22: crea 3.5, T4 2.7, glu 39, WBC_29K, neu 26K, 1/6/22: crea 1.9, T4 2.9, FT4 68, WBC_24K, neu 20K.

Date of Previous IntraPet Ultrasound: 3/18/21.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Rachel Brillhart, RDMS.

SEX

Neutered male

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**AGE**

8/20/05

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.

WEIGHT

8.94 lbs

Left kidney is normal in size (3.53 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.

INTERPRETED BYBeth Johnson, DVM
DACVIM

Right kidney is normal in size (3.36 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.

HOSPITAL NAME

Everhart VH

Adrenal Glands

Bilaterally uniformly plump egg-shaped adrenals are noted with hypoechoic echogenicity. The left adrenal gland measured 0.58 cm The right adrenal gland measures 0.4 cm thick.

REFERRING VET

Dr. Notarangelo

Spleen

Spleen is subjectively normal in size with normal smooth margins. Parenchyma is normal in echogenicity and echotexture. No focal nodules or masses are observed. Splenic vasculature appears normal.

INVOICE

96054

Liver

Liver is subjectively normal in size. Margins are sharp and smooth. It has normal homogenous echotexture and normal echogenicity. No focal lesions are observed. Visible vasculature appears normal. Gallbladder is mildly distended with anechoic contents. The wall is smooth without visible thickening. There is no evidence of common bile duct dilation.

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

The pancreas is prominent and hypoechoic to the surrounding tissue. The visible capsule is smooth with normal contour. There is no visible pancreatic duct dilation. There is mildly hyper reactive surrounding mesentery and fat appreciated. No free fluid is noted.

Free Abdomen

Lymph nodes are normal with no observed enlargement.

ULTRASONOGRAPHIC FINDINGS

PRIMARY FINDINGS:

- Prominent hypoechoic pancreas with hyperreactive mesentery. This is consistent with mild potentially acute on chronic pancreatitis.

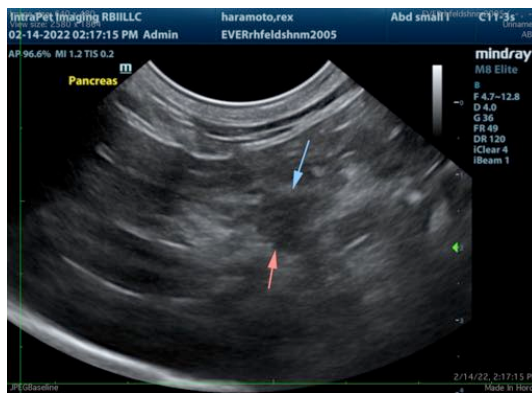
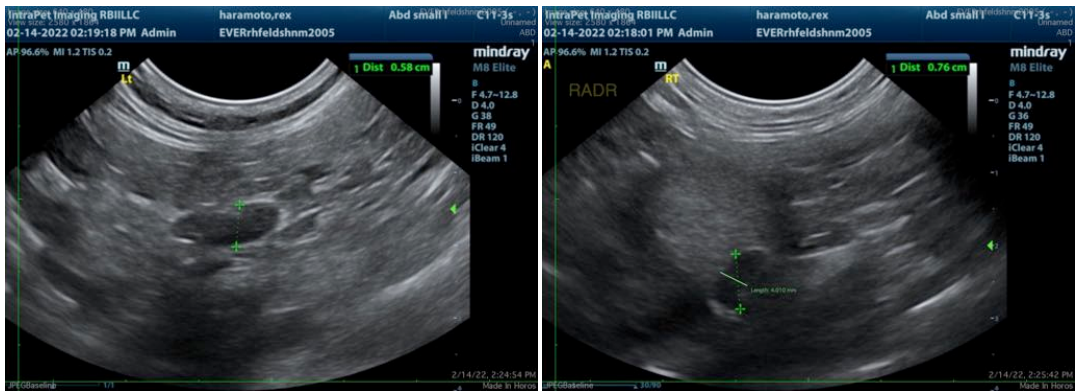
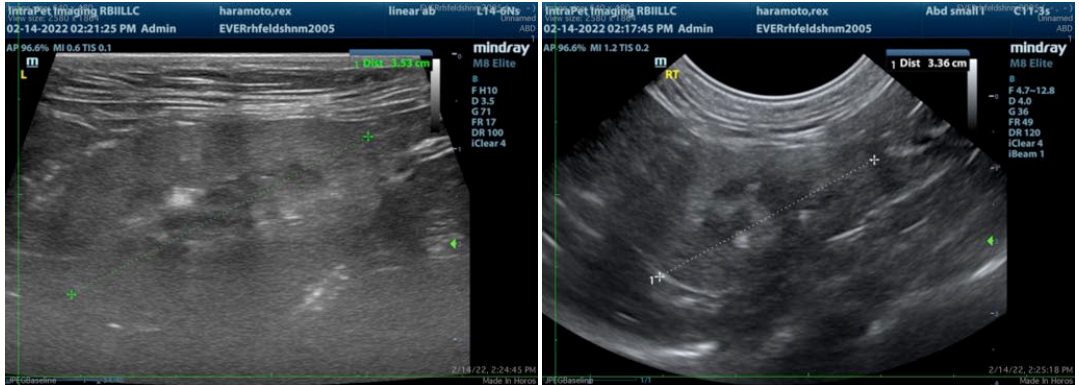
SECONDARY FINDINGS:

- Age related adrenomegaly – likely a benign age-related change. This change can be caused by chronic stress/disease, so investigation for/management of other disease (chronic kidney disease, hyperthyroidism, etc.) is recommended.
- 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.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Recommendations for this patient include a gastrointestinal malabsorption panel including TLI, PLI, folate and cobalamin to Texas A&M GI laboratory for further assessment of the gastrointestinal tract as a potential contributing cause to the weight loss as well as further investigation of the suspected pancreatitis. Given this patient's improved clinical signs once starting Methimazole in the face of new azotemia after starting Methimazole.

Unfortunately this patient has several conditions with opposing therapies including hyperthyroidism, chronic kidney disease and potentially mild pancreatitis, and a therapeutic balance, including diet choice, etc. may be difficult. The initial recommendation is to decrease the dose of Methimazole in hopes that the weight loss does not return and the azotemia becomes static and/or ideally improves. Ideally a low-fat diet given the suspicion of chronic pancreatitis would be ideal; however, a kidney diet may trump a low fat diet depending on the patient's continued azotemia in the face of necessary management of hyperthyroidism.



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