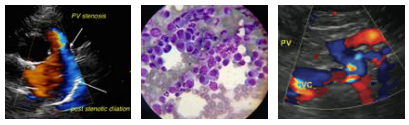
IMAGING PERFORMED BY

IntraPet.com



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DATE
2/15/22

PATIENT
Khloe Scelsi Zorbis

SPECIES
Canine

BREED
Beagle

SEX
Spayed Female

AGE
5/30/12

WEIGHT
37.3 lbs

INTERPRETED BY
Kathleen Sennello DVM, MS, Diplomate ACVIM (Small Animal Internal Medicine)

HOSPITAL NAME
Animal Emergency Hospital

REFERRING VET
Dr. Willer

INVOICE
96076

PRESENTING CLINICAL SIGNS

History: Presenting Complaint: Referral for Continued Care. Date: 02-12-2022 Notes: known Addison's - gets monthly percorten injection and is on prednisone 2.5mg PO SID (am) had lytes check prior to getting percorten injection- K- 5.2; sodium normal since that visit- declined in appetite ,lethargy; went back to RDVM- bloodwork showed marked elevation in kidney values and elevation in liver values K- 5.9 CBC- NSF referred for continued care- no change in diet not aware of getting into anything per RDVM- not current on Lepto has history of elevation in liver values in the past- known heart murmur- had a cardiac evaluation with IntraPet 3/2021 got prednisone this morning at 7:30am. Assessment: history of Addison's, hypothyroidism and elevated liver values, azotemia, abnormal lytes, elevated liver values, decreased appetite. Plan: discussed PE findings with owner- discussed the concern with elevation in kidney values- if this is due to unstable Addison's condition vs worsening kidney disease, infection, pancreatitis; discussed the elevation of the liver values and possible causes; discussed about lepto- owner reports that she does not drink from containment sources of water. discussed treatment plan- recommend hospitalization, dilution of the BUN, getting xrays and UA; IVF, pain medication, anti-nausea medication and monitor lytes; increased the prednisone to twice a day ; and rechecking liver and kidney values in 24 hours; discussed if not responding to medical management- consider an ultrasound owner okay with plan.
Current Medications: Proviable, Gabapentin, Thyro Tabs, Clavamox, Prednisone, Ondansetron, Buprenex, Gabapentin, Entyce, Cerenia.
Radiographs: no obvious masses ; mild GI pattern; narrowing of the lumbar spaces.
Date of Previous IntraPet Ultrasound: 3-12-2021 echocardiogram.
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

The urinary bladder is moderately distended with anechoic urine. The Bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

The left kidney has a normal shape and size (5.09 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. Mild pyelectasia was noted and measured 0.33 cm. There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (4.68 cm). Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. Pyelectasia was noted and measured 0.68 cm. There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is small/flat in size measuring 0.35 cm at the caudal pole It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

The right adrenal gland is small/flat in size measuring 0.3 cm at the caudal pole. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

Spleen
The spleen is subjectively normal in size, echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

Liver
The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is homogenous echotexture. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed. The gallbladder lumen is moderately distended. The wall of the gallbladder is not thickened and has a smooth mucosal surface. Luminal contents are primarily anechoic. The cystic and common bile ducts are normal/not visible.

Gastrointestinal
The stomach contains minimal luminal contents. It measures at a normal thickness of <0.7cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layers is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

The visualized areas of duodenum, jejunum and ileum have a relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. The duodenum measured as normal and the jejunum measured as normal (0.34 cm). Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Sections of colon are visualized with formed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

Pancreas
The pancreas is prominent and mottled compared to the surrounding isoechoic mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

Free Abdomen
Evaluation of the peritoneal cavity did not reveal any evidence of effusion, or subjective lymphadenomegaly. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of normal uniform echogenicity.

Other
Ring down artifact is visualized at the level of the diaphragm.

ULTRASONOGRAPHIC FINDINGS
PRIMARY FINDINGS:

- Decreased corticomedullary distinction in both kidneys with bilateral pyelectasia. Mild loss of corticomedullary distinction in both kidneys could be consistent with chronic degenerative disease or interstitial nephrosis.

- Prominent, mottled pancreas. The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.

SECONDARY FINDINGS:

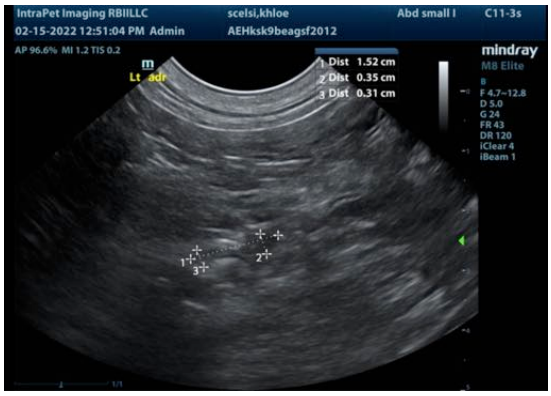
- Small adrenal glands. this would be expected with a diagnosis of Addison's disease.
- Ring down artifact visualized. This can be seen with pulmonary parenchymal disease.

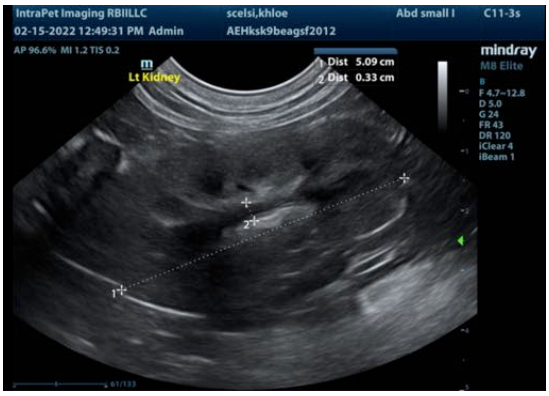
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

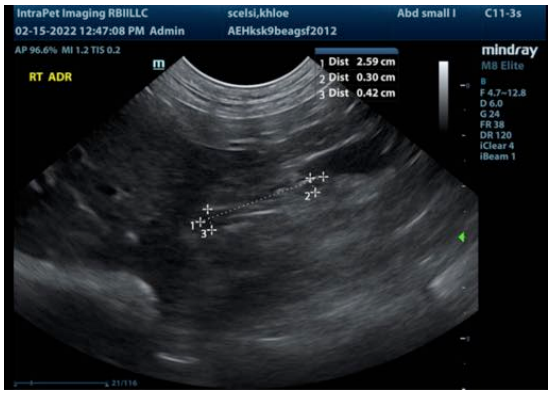
The kidney changes are consistent with chronic renal disease. I recommend blood pressure evaluation, urinalysis and culture.

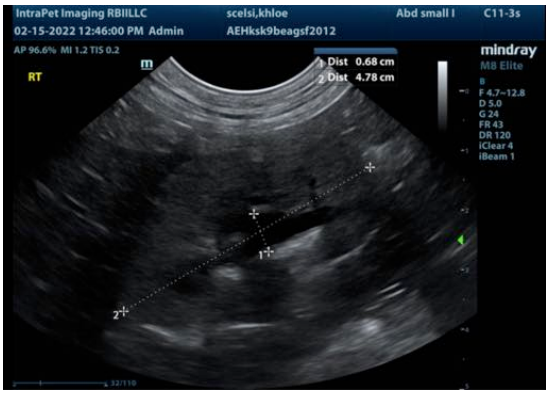
There seems to be some reason for escalation in the azotemia recently (I am assuming it was normal previously?). This could be an acute on chronic crisis due to dehydration, infection, inadequate Percorten dose/administration timing, etc. If the potassium is difficult to control I would be tempted to given another half dose of Percorten and see if there is any improvement. Additionally consider Leptospirosis testing if clinically appropriate.

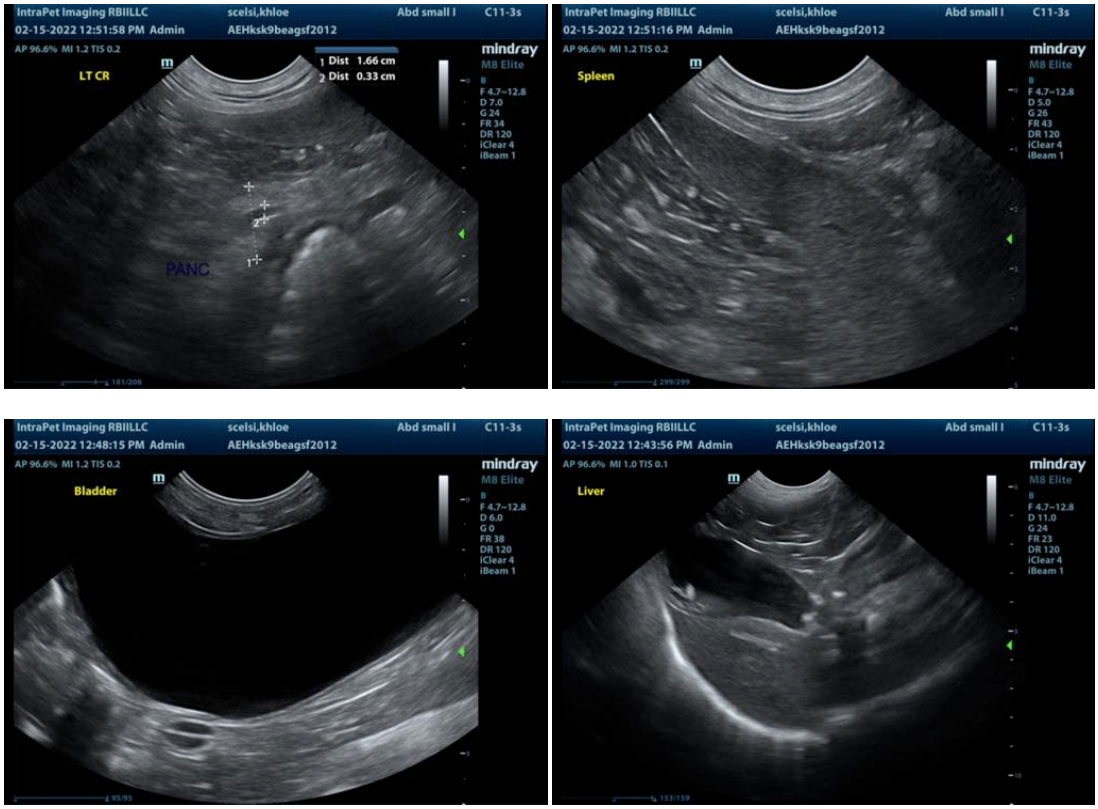
No calculi or mass effects are observed. Some of the liver enzyme elevations could be induced due to the steroids, but if there is concern for primary hepatopathy then you can consider liver function testing and a FNA of the liver.











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.

Kathleen Sennello DVM,MS, Diplomate ACVIM (Small animal Internal Medicine)
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