

DATE PRESENTING CLINICAL SIGNS

3/22/23

Acute hepatopathy diagnosed 2/6/23 during exam for anorexia and vomiting. Transferred to 24 hour facility, had ultrasound through AVIMO and FNA of liver which did not show any neoplastic or infectious agents. Lepto PCR negative through the ER. Treated with denamarin, clavamox, enrofloxacin, and liver values have improved to nearly normal and pet is clinically much improved. On recheck bloodwork, she is azotemic. First morning UA shows isosthenuria. Started KD diet.

PATIENT

Bella Bates

Current Medications: Enrofloxacin 136 mg 1 and 1/2 PO SID, Clavamox 250 mg PO BID, Denamarin SID, Cerenia PRN

SPECIES

Canine

Lab Results: See attached.

Radiographs: See attached.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

BREED

Border Collie

Imaging Performed By: Rachel Brillhart, RDMS.

SEX

Spayed female

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The **urinary bladder**, trigone, and pelvic urethra presented normal thicknesses and normal tone. The ureters were not visible which is normal. No uroliths or sediment were visualized and anechoic urine was present. No evidence of inflammatory or neoplastic changes was noted. Ureteral papillae were normal.

AGE

3/7/10

The **kidneys** revealed normal size and structure, corticomedullary definition and ratio for this age. The cortices presented largely uniform texture with normal echogenic relationship to liver and spleen. Medullary structure differed distinctly from the cortex. The capsules were acceptably uniform without significant irregularities. The left kidney measured 4.86 cm with pyelectasia that measured 0.24 cm. The right kidney measured 5.43 cm with slight pyelectasia that measured 0.24 cm. An anechoic cyst was noted and measured 1.1 cm at the cranial pole.

WEIGHT

38 lbs

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

Adrenal Glands

Both **adrenal glands** were visualized and recognized as having normal shape, size, position and echogenicity for this breed. The phrenic vasculature, glandular echogenicity and detail were unremarkable. Capsule, cortex, and medullary definition were normal for this age patient. The left adrenal gland measured 2.66 x 0.59 cm in the caudal pole and 0.6 cm at the cranial pole. The right adrenal gland measured 1.74 x 0.51 cm at the caudal pole and 0.65 cm at the cranial pole.

HOSPITAL NAME

Airpark AH

REFERRING VET

Dr. Owens

Spleen

The **spleen** was largely smooth with subtle heterogeneous parenchymal changes while maintaining normal echogenic relationship to the liver and kidney. These changes are consistent with normal age-related alteration. The capsule was smooth without noticeable impingement from within the spleen or from pathology in the adjacent abdomen. The splenic vasculature demonstrated normal volume without signs of congestion or significant contraction. No evidence of active acute or chronic inflammatory, neoplastic, or infarctual changes was noted.

INVOICE

43473

Liver

The **liver** images submitted revealed subjectively normal liver size, contour, and structure. Parenchymal echogenicity was naturally coarse and hypoechoic to the spleen. Vascular and biliary tracts were of normal volume with no evidence of congestion. The gallbladder was mildly over distended with suspended and dependent debris, yet not to the level of emerging mucocele, yet sludge appears to be mildly excessive. No adjunctive inflammation was noted.

Gastrointestinal

Examination of the **gastrointestinal tract** revealed a stomach and intestine free of stasis, of normal wall thickness, acceptable curvilinear mural detail, and peristaltic activity. Small and large intestine demonstrated normal luminal chyme and stool consistency respectively. No obstructive or overt infiltrative disease was noted. No associated abnormal lymphatic activity was noted.

Pancreas

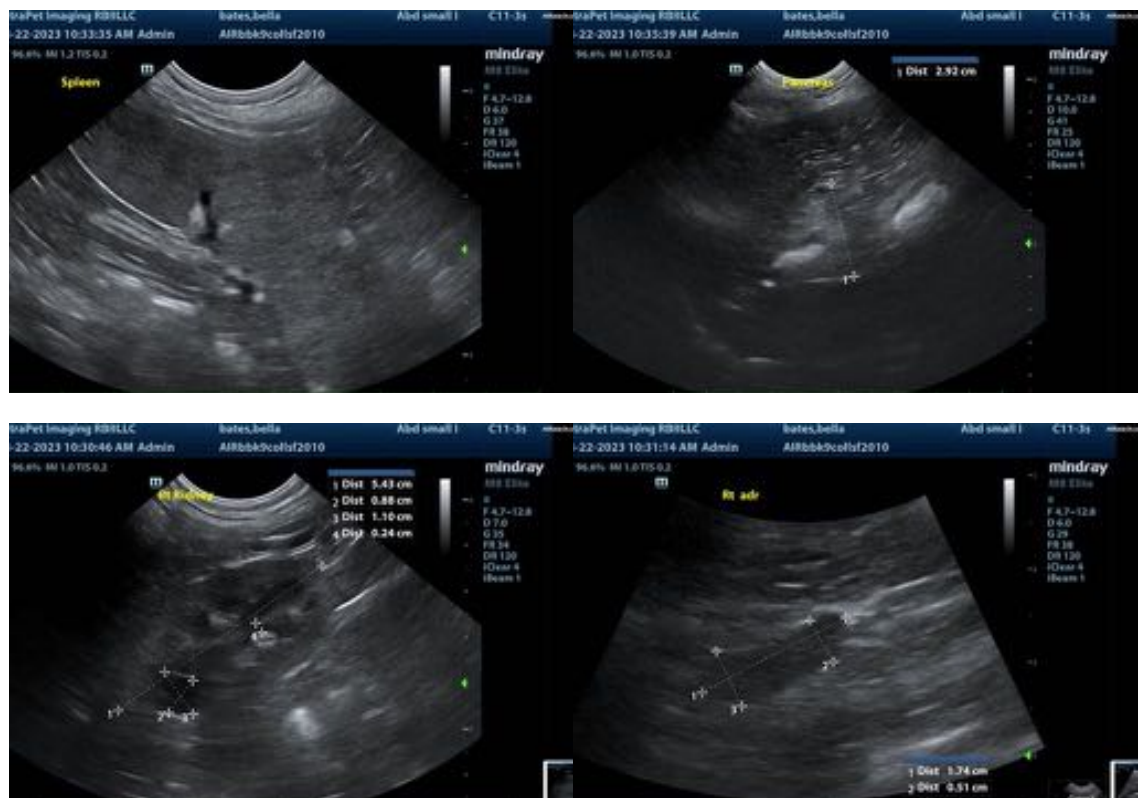
The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Some parenchymal remodeling, however, with mild deviation from curvilinear normalcy was observed. Pancreatic duct and capsular irregularities were present consistent with age related changes. If pain upon imaging (+ Murphy sign) was present or if the patient is focally painful in subxiphoid palpation then low-grade smoldering chronic pancreatitis should be suspected.

ULTRASONOGRAPHIC FINDINGS

Minor degenerative renal changes.
Age related splenic and hepatic changes.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The causes of acute renal insult such as Leptospirosis or toxin exposure as well as occult Addison's should all be ruled out even though the adrenal glands appear normal. 72 hour IV fluid protocol is recommended to correct azotemia. Blood pressure measurements are indicated as well as appropriate titers such as Leptospirosis.





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.

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