

**DATE PRESENTING CLINICAL SIGNS**

2/13/23

PATIENT

Kendyl Andrews

History: P presented for hair loss. Hair falling out in clumps for past four months, this is new for P. No bald patches, no scabbing/crusting. At night gets anxious/paces. No new food or treats, same food for 10+ years. No changes in house. Doesn't fight with house mates, hasn't seen her pulling hair out. Gets ear infections in summer - rolls around in the dirt when outside. Eating slower but still eating same amount in total. Owner's daughter thinks spine is more prominent. PE - WNL - appears to have more coat shedding

SPECIES

Canine

BREED

Mixed Breed

Current Medications: Acepromazine as needed for appointments

Lab Results: Elevated liver values - previously normal (2021): ALT – 894, AST – 168, ALP – 255, GGT - 18

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Rachel Brillhart, RDMS.

SEX

Spayed Female

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**AGE**

2/6/10

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 were noted. Ureteral papillae were normal.

WEIGHT

45.3

The **kidneys** revealed largely normal size and structure, corticomedullary definition and ratio (cortex 1/3 of medulla) were essentially maintained with some minor age-related loss of curvilinear patterns regarding the capsule and C/M junction. The cortices presented largely uniform texture with some increased echogenicity expected for his age patient. Medullary structure differed distinctly from that of the cortex and no evidence of pelvic dilation was present. The right kidney measured 6.31 cm. The left kidney measured 5.9 cm.

INTERPRETED BYEric 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 right adrenal gland measured 2.71 cm x 0.61 cm at the caudal pole and 0.65 cm at the cranial pole. The left adrenal gland measured 2.3 cm x 0.63 cm at the caudal pole and 0.67 cm at the cranial pole.

HOSPITAL NAME

Warm & Fuzzy VC

Spleen

The **spleen** presented a smooth homogeneous parenchyma hyperechoic to liver and renal cortical parenchyma. The capsule was smooth without noticeable expansion or deviation from within the spleen or adjacent pathology. The splenic vasculature demonstrated normal volume without signs of congestion or thrombosis. No sonographic evidence of acute or chronic inflammatory, neoplastic, or infarctual changes were noted.

REFERRING VET

Dr. Weber

INVOICE

21105

Liver

The **liver** revealed coarse architecture and increased portal markings. A hyperechoic 2.0 cm nodule was noted medial ventral to the gallbladder. Hypoechoic nodular changes were also noted.

Gastrointestinal

The **gastrointestinal tract** presented considerable gastric artifact due to the presence of ingesta. This did not permit thorough evaluation of portions of the gastric and upper intestinal structure. No overt abnormality was seen in the visualized tissue, however. This is consistent with a post-prandial presentation within a few hours of mealtime. If the prandial temporal interval does not fit the case history, and the patient presents a history of post-prandial vomiting, this could indicate a delayed upper gastrointestinal outflow due to primary or secondary pyloric hypertrophy, upper GI infiltrative disease, motor deficits, or a non-visualized foreign body. A prudent approach would be to rescan this patient at 24 hour NPO status to further review the non-visible regions if stomach primarily as well as assess any delayed outflow issue.

Pancreas

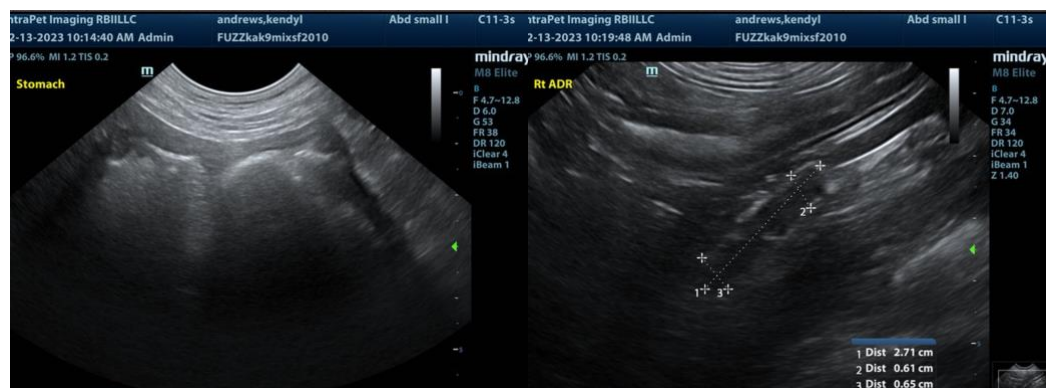
The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Some minor parenchymal remodeling, however, with mild deviation from curvilinear normalcy was observed. Pancreatic duct and capsular irregularities were present consistent with age related changes.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

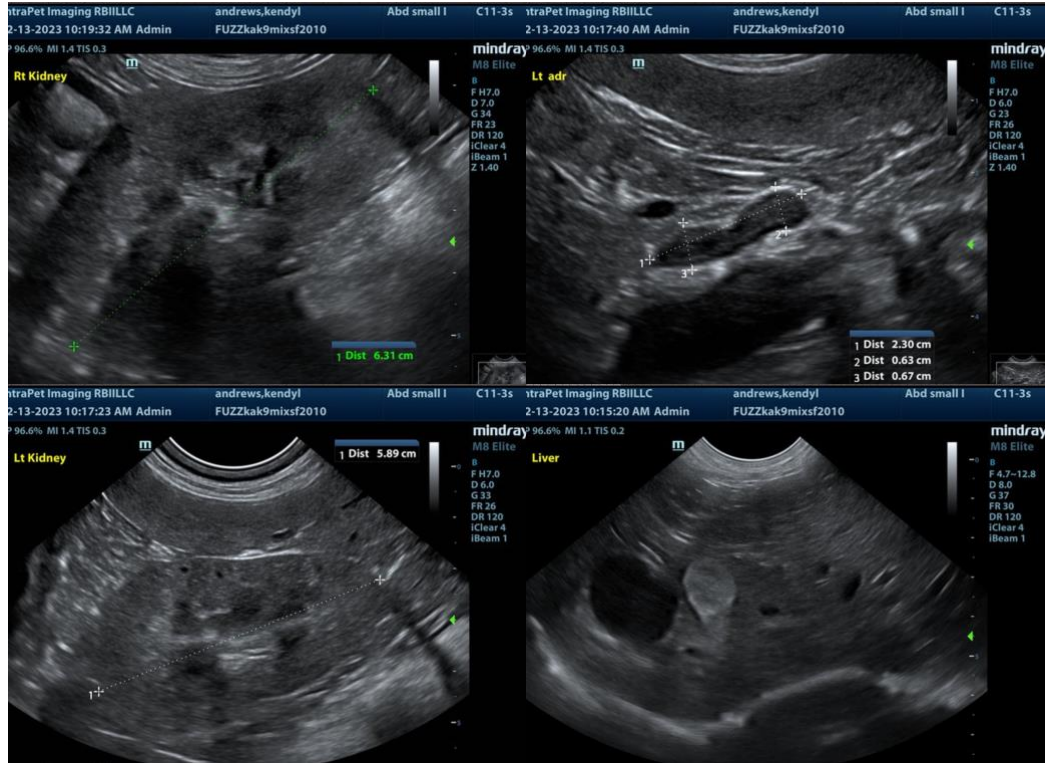
ULTRASONOGRAPHIC FINDINGS

- Hepatic remodeling with subjectively benign nodular changes to monitor. Lipogranulomatous change vs carcinoma adjacent to the gallbladder.
- Full stomach, likely postprandial presentation, however, if the patient was NPO , then delayed outflow should be considered, yet structurally the GI tract was unremarkable.
- Age-related renal and pancreatic changes

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

These are largely expected changes for this age patient with inflammatory hepatopathy. Given the ALT and hepatic presentation, FNA is warranted for further definition.





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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