

**DATE PRESENTING CLINICAL SIGNS**

1/3/2022

History: patient presents for dental cleaning. Owner - reported pu/pd, labs showed mild elevation ALP (200) and USG of 1.016.

PATIENT

Annika Rwakazina

Lab Results: ALP 200, USG 1.016.

Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

SPECIES

Canine

Imaging Performed By: Andi Parkinson, RDMS

BREED

Retriever mix

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended with anechoic urine. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

AGE

7/5/2010

The left kidney is normal size (6.69 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild to moderate loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

WEIGHT

73.4 lbs.

The right kidney is normal size (7.28 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

INTERPRETED BY

Andrea Nicastro, DVM,
Diplomate ACVIM
(Small Animal Internal
Medicine)

Adrenal Glands

The left adrenal gland is normal size (0.70 cm at cranial pole) (0.81 cm at caudal pole) (2.79 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

HOSPITAL NAME

Everhart VC

The right adrenal gland is normal size (0.92 cm at cranial pole) (0.77 cm at caudal pole) (2.45 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

REFERRING VET

Dr. Hays

Spleen

The spleen is normal in size (2.48 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

INVOICE

12766

Liver

The liver is subjectively prominent in size with slightly swollen peripheral contours. The parenchyma is isoechoic relative to the spleen and exhibits a finely heterogeneous pattern. No distinct focal lesions are observed. Lobar biliary stones are visualized. Hepatic vasculature is of normal volume with no evidence of congestion. The gall bladder lumen is moderately distended. The wall is normal in thickness. A small to

moderate amount of aggregated echogenic partially dependent to suspended debris/sludge is observed within the lumen along with a few non-obstructive choleliths. The cystic and common bile ducts are normal/not seen.

Gastrointestinal

The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is not distended. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The pyloric outflow tract is patent. The small intestinal lumen is not dilated. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. No obstructive disease is noted.

Pancreas

The pancreas is normal in size with normal peripheral contours. The pancreatic duct is normal. The base and limbs of the pancreas are isoechoic to surrounding omental fat. No focal lesions are observed. There is no evidence of peripancreatic inflammation or effusion.

Free Abdomen

The peritoneal cavity is normal. There is no evidence of inflammation or effusion. The abdominal lymph nodes are normal/not visible.

ULTRASONOGRAPHIC FINDINGS

Primary Findings:

- The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, regenerative nodular hyperplasia, and/or age-related remodeling. Inflammatory and infiltrative disease are considered less likely. The intrahepatic biliary stones are likely an incidental finding.
- Gallbladder changes could be consistent with cholestasis, early mucocele formation or fasting. The small choledocoliths are non-obstructive at this time.

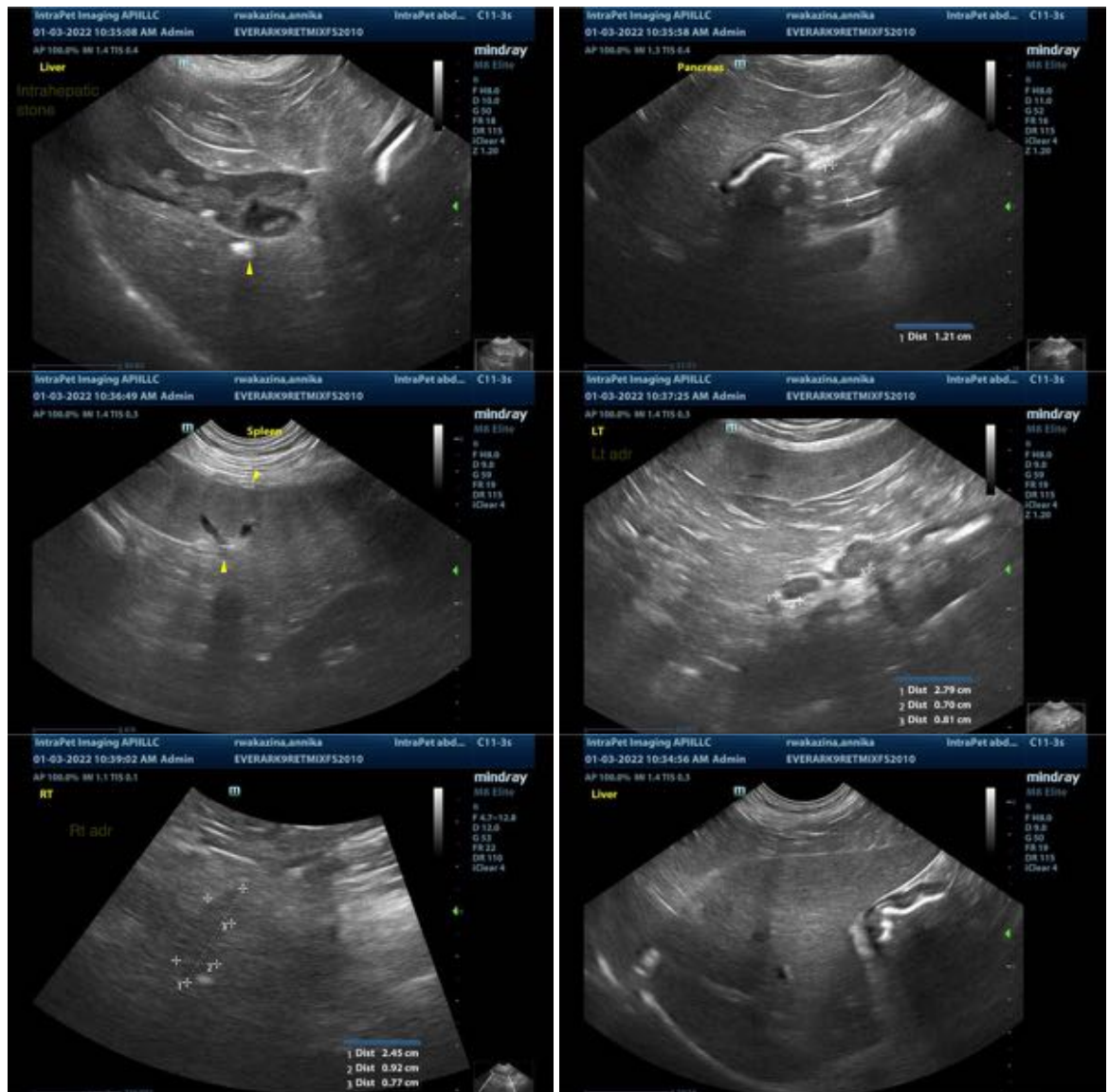
Secondary Findings:

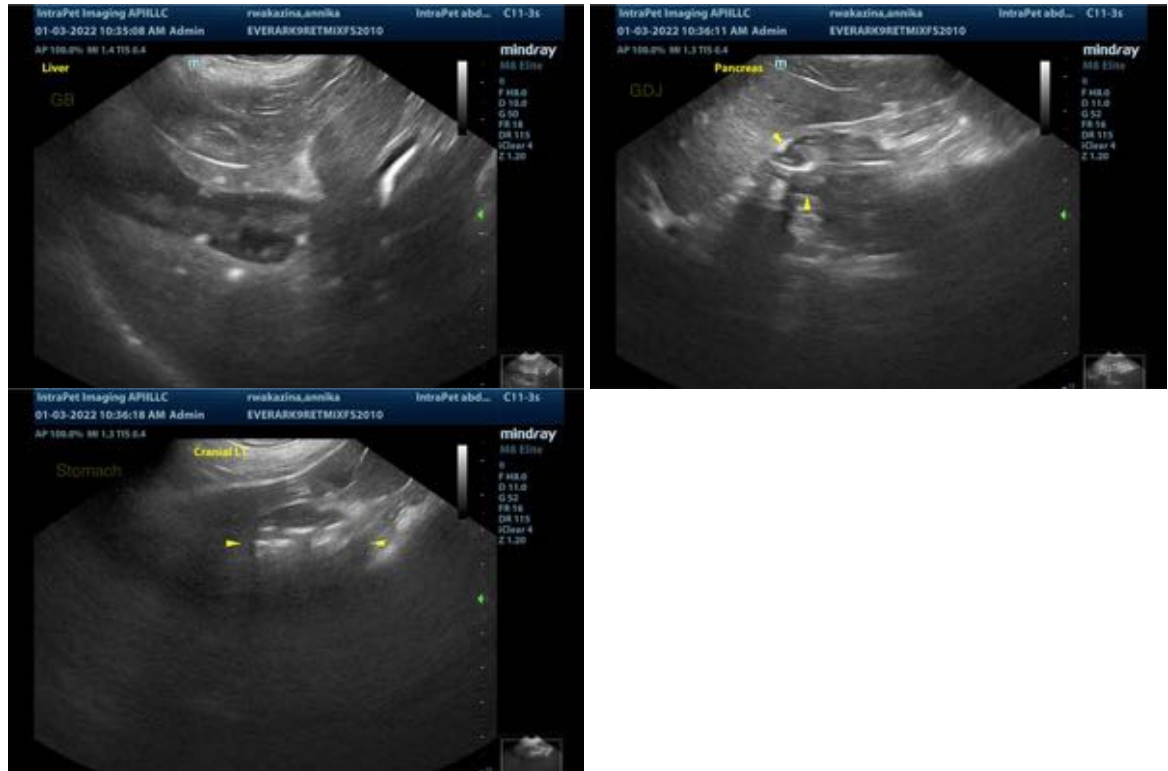
- Bilateral, non-specific age-related renal changes.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Serial monitoring (i.e., every 3-4 months) of the patient's liver values is recommended. If values continue to increase, a repeat abdominal ultrasound +/- hepatic tissue sampling may be warranted.
- Given the patient's PU/PD, consider the following:
 1. Cushing's testing (i.e., low-dose dexamethasone suppression test or ACTH stimulation test).

2. Urine culture and sensitivity to assess for occult pyelonephritis
 3. +/- Leptospirosis testing (i.e., blood and urine PCR, serology)
 4. +/- pre- and post-prandial serum bile acids to assess hepatic function
 5. Depending on the results of the above diagnostics, a DDAVP trial +/- modified water deprivation test may be warranted.
- Regarding the gallbladder changes, consider a repeat ultrasound in 3-4 weeks, preferably 2 hours post-small meal to better determine if the gallbladder sludge is secondary to fasting.





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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