

**DATE PRESENTING CLINICAL SIGNS**

12/9/21

History: Pet presented for annual wellness 11/27. Obese with severe dental disease. New ALKP elevation 223 (previous 74). Planned pre-op ultrasound screening in preparation for dental. Pet is asymptomatic.

**PATIENT**

Cody Vandiver

Lab Results: 11/27/21: ALKP 223, USG 1.013.

Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

**SPECIES**

Canine

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****BREED**

Maltese Mix

**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 2.00 cm, are normal.

**SEX**

Neutered Male

**AGE**

5/14/13

The prostate is normal in size (0.70 cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

**WEIGHT**

15.31 Lbs.

The left kidney presented normal size (4.18 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with normal corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydronephrosis.

The right kidney presented normal size (4.22 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with normal corticomedullary distinction. A small cortical cyst is visualized. There is no evidence of pyelectasia, nephroliths, infarcts or hydronephrosis.

**INTERPRETED BY**

Andrea Nicastro, DMV,  
Diplomate DACVIM  
(Small Animal  
Internal Medicine)

**Adrenal Glands**

The left adrenal gland is normal size (0.60 cm at cranial pole) (0.53 cm at caudal pole) (1.96 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.

**IMAGING PERFORMED BY**

Andi Parkinson RDMS

The right adrenal gland is upper limits normal size (0.52 cm at cranial pole) (0.56 cm at caudal pole) (1.83 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

**Spleen**

The spleen is normal in size (0.85 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. A few small (<1.00 cm) ill-defined hyperechoic to heterogeneous, slightly cavitated areas are observed. Splenic vasculature is normal.

**REFERRING VET**

Not Provided

**Liver****INVOICE**

12891

The liver is subjectively enlarged with slightly swollen peripheral contours. The parenchyma is isoechoic relative to the spleen and diffusely homogeneous in appearance. No distinct focal lesions are observed. Vascular and biliary tracts are of normal volume with no evidence of congestion.

The gall bladder lumen is moderately distended. The wall is thin and smooth. A small amount of suspended echogenic debris is observed within the lumen. 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 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 or overt infiltrative disease is noted.

### ***Pancreas***

The right limb of the pancreas is visible with normal curvilinear peripheral contours. The parenchyma is largely isoechoic relative to surrounding omental fat and slightly mottled in appearance. The pancreatic duct is visible but not overtly dilated. There is no evidence of peripancreatic inflammation or effusion. The mesentery effacing the serosal surface is slightly hyperechoic.

### ***Free Abdomen***

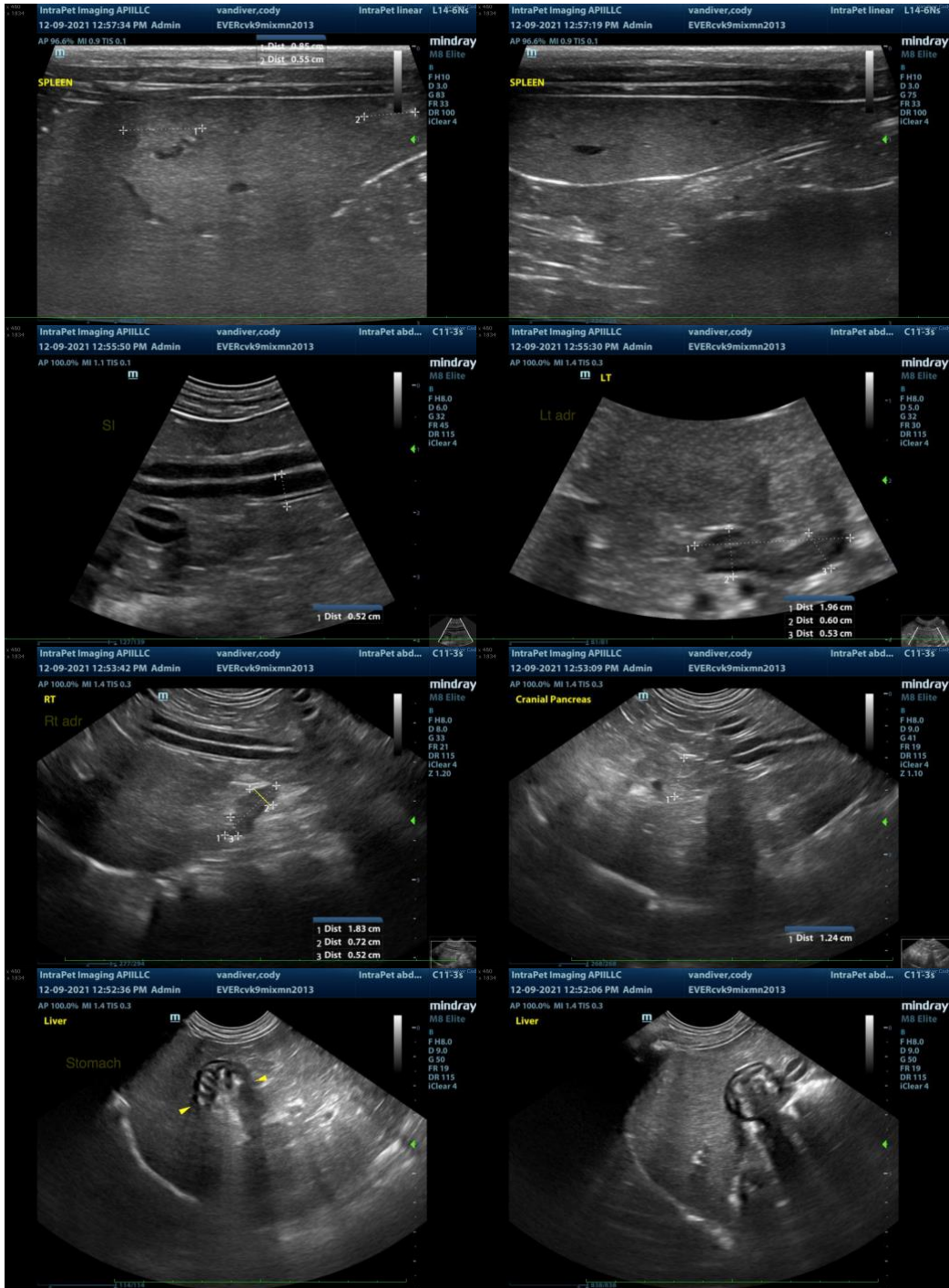
There is no evidence of free fluid. The abdominal lymph nodes are normal/not visible.

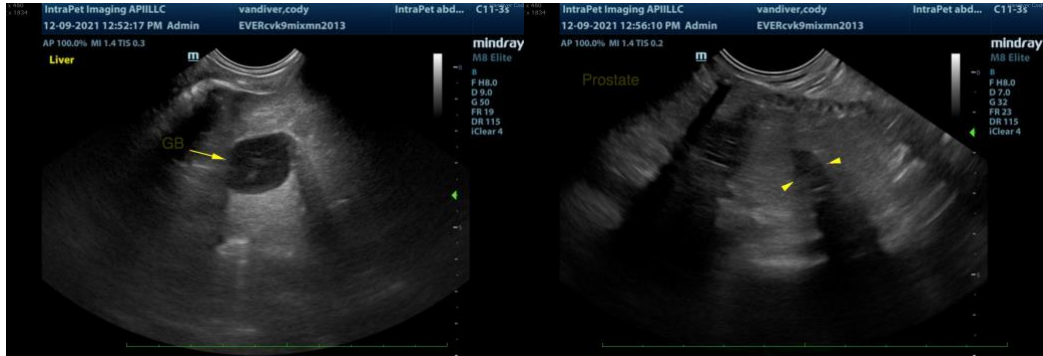
## **ULTRASONOGRAPHIC FINDINGS**

- 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 unlikely.
- The splenic lesions may represent benign pathology (i.e., lymphoid hyperplasia or extramedullary hematopoiesis) with benign cystic areas. Alternatively, emerging neoplasia is possible. Cytology or histopathology would be necessary to differentiate these possibilities.
- The pancreatic changes are suggestive of age-related pancreatic remodeling +/- fibrosis. Mild low-grade inflammation may also be present, particularly if the patient is painful on palpation of the cranial abdomen.

## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

- Serial monitoring (i.e., every 3-4 months) of the patients' liver values is recommended. If values continue to increase, a repeat ultrasound +/- hepatic tissue sampling may be warranted.
- Consider testing for hyperadrenocorticism with a low-dose dexamethasone suppression test or ACTH stimulation test if clinical signs (i.e., PU/PD) develop in the future.
- A repeat ultrasound is recommended in 1-2 months to reevaluate the splenic lesions.





**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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