

**DATE**

12/16/22

PRESENTING CLINICAL SIGNS

Elevated liver values.

Current Medications: Denamarin.

Lab Results: ALT 68 on 12/9/22, ALKP 502 on 12/9/22, ALKP 471 on 11/11/22.

PATIENT

Nicole Bratton

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.

SPECIES

Canine

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System****BREED**

Poodle

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.

SEX

Spayed female

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 and no evidence of pelvic dilation was present. The capsules were acceptably uniform without significant irregularities. Slight pinpoint mineralization was noted in the bladder and measured 0.13 cm and was non-obstructive. This should pass without difficulty. The left kidney measured 4.19 cm. The right kidney measured 4.3 cm.

AGE

1/22/16

WEIGHT

14 lbs

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 1.91 x 0.62 cm at the caudal pole and 0.49 cm at the cranial pole. The right adrenal gland measured 1.94 x 0.57 cm at the caudal pole and 0.65 cm at the cranial pole with a hyperechoic nodule. Lipogranulomatous change was noted at the cranial pole measuring 0.65 x 0.45 cm.

INTERPRETED BYEric Lindquist, DMV
DABVP, Cert. IVUSS**Spleen**

The **spleen** was largely normal with a hypoechoic, 0.5 cm nodule in the mid cranial body. The splenic architecture was not disrupted.

HOSPITAL NAME

Banfield Abingdon

REFERRING VET

Dr. Simpson

Liver

Exam of the cranial abdomen demonstrated excessive **liver** size, swollen contour, with conserved uniform architecture. Parenchymal echogenicity was diffusely isoechoic to the spleen and falciform fat. The portal vein to vena cava ratio was normal 1:1 and each measured 0.5 cm. Minor excessive GB debris was noted with the presence gall bladder dilation and precipitate without the overt formation of mucocele but this may be an issue in the future. This type of liver presentation typically is associated with slow and gradual SAP elevations with low-grade ALT rise. USG-FNA sampling is encouraged if more aggressive LE profiles are present such as ALT > 200 or rapid rise in SAP. These presentations are usually reactive hepatopathies owing to other disease processes either endocrine (Diabetes, Hypothyroidism, Cushing's disease), "antigen surveillance" from the gut/pancreas, or idiopathic breed predisposed progressions.

INVOICE

43179

Gastrointestinal

Examination of the **gastrointestinal tract** revealed a stomach and intestine of normal wall thickness, acceptable curvilinear mural detail, and peristaltic activity. Minor hyperperistalsis and reactive mesentery

was noted around the small intestine. 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. Pancreatic duct and capsular contour were acceptably normal and parenchyma respected normal curvilinear patterns. No overt evidence of active inflammatory or neoplastic disease was noted.

Heart

Rapid view of the heart revealed no evidence of pathology.

ULTRASONOGRAPHIC FINDINGS

Benign hepatopathy.

Subtle splenic nodule.

Minor lipogranulomatous right adrenal nodule.

Minor bladder concretion.

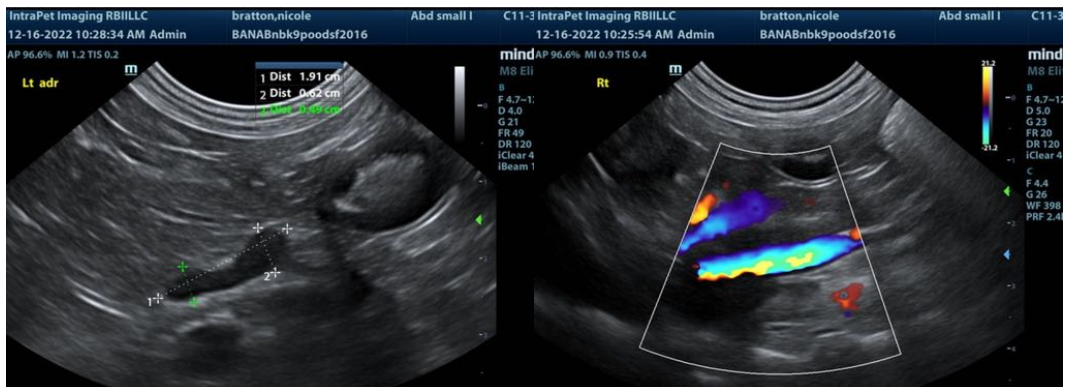
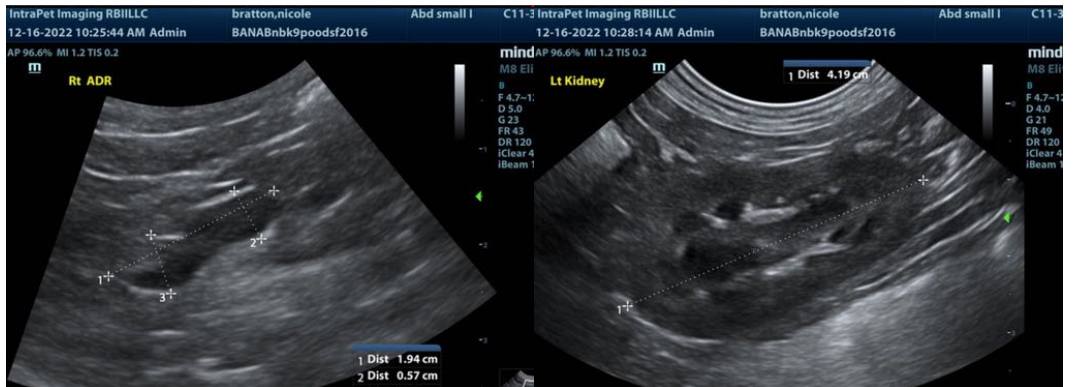
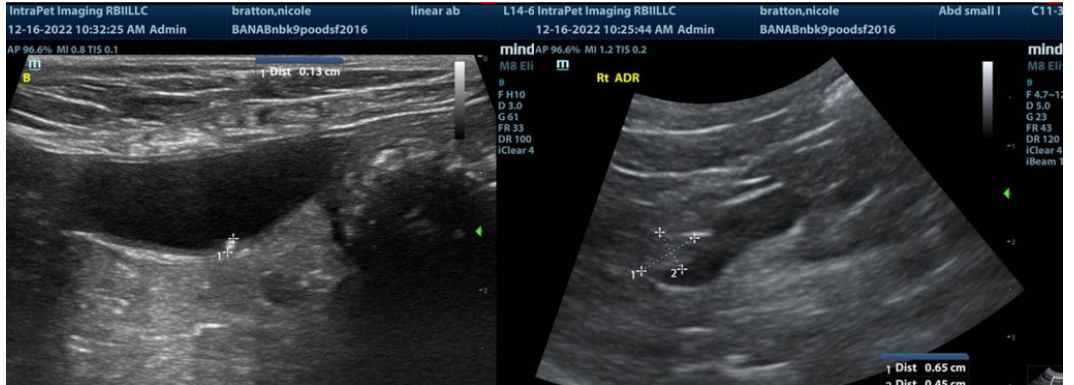
Slight pinpoint mineralization was noted in both kidneys.

Stasis in the intestines.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The patient is likely passing small calculi periodically, yet there was no evidence of obstruction or suspicion of obstruction as the calculi or mineralization are minor. FNA of the splenic nodule and liver can be considered for further definition. The liver elevation appeared to be a benign change. Fecal exam is warranted as well as diet change given the GI presentation.





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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