

**DATE PRESENTING CLINICAL SIGNS**

8/17/23

History of long-standing liver value elevations. Historically heterogenous liver on ultrasound and concern for Cushing's but LDDST normal after last ultrasound. Recently owner feels that PU/PD is much worse. Interested in repeat ultrasound and assessment of liver/adrenal glands prior to retesting for Cushing's.

PATIENT

Paisley Polchito

SPECIES

Canine

BREED

Mixed

SEX

Spayed Female

AGE

5/28/12

WEIGHT

43.6 Pounds

INTERPRETED BY

Kathleen Sennello DVM,
MS, Diplomate ACVIM
(Small Animal Internal
Medicine)

HOSPITAL NAME

Everhart Vet Hospital

REFERRING VET

Dr. Notarangelo

INVOICE

44743

Current Medications: Bravecto 22-44 lbs Green 8/10/2023, Denamarin Advanced Chewable Tablets for Dogs Small to Medium Dog 6/13/2023, Clavacillin 250mg tablet 4/28/2023, PREDNISONONE 20 MG 4/28/2023, Trazodone Hydrochloride Tablet 100mg 12/6/2022, Denamarin Advanced Chewable Tablets for Dogs Small to Medium Dog 11/9/2022, BRAVECTO 22-44 LBS. GREEN 7/22/2022
Lab Results: ALT 175, ALKP 1988, USG 1.008, 2+ protein, chol 358, tri 475, PSL 217.
Date of Previous IntraPet Ultrasound: 11/11/2021, 7/29/2021. See attached.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Andi Parkinson, BS, RDMS.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

The urinary bladder is moderately distended with anechoic urine. The Bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

The left kidney has a normal shape and size (6.1 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There are small shadowing mineralizations visualized in the cortex. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (6.33 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There are small shadowing mineralizations visualized in the cortex. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is large, measuring 0.99 cm at the caudal pole. It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

The right adrenal gland is large, measuring 0.87 cm at the caudal pole. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

Spleen

The spleen is subjectively normal in size, echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

Liver

The liver is large in size, and normal in echogenicity with smooth peripheral margins. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. There is a small hyperechoic nodule visualized within the parenchyma measuring 0.63 cm x 0.58 cm. Additionally, there is a hypoechoic nodule near the gallbladder neck measuring 0.90 cm x 1.16 cm.

The gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are mild and primarily anechoic. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.7cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layers is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

The visualized areas of duodenum, jejunum and ileum have a relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. Jejunum wall measures 0.34 cm. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Sections of colon are visualized with formed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

Pancreas

The area of the pancreas is normal and isoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

Free Abdomen

Evaluation of the peritoneal cavity did not reveal any evidence of effusion, or subjective lymphadenomegaly. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of normal uniform echogenicity.

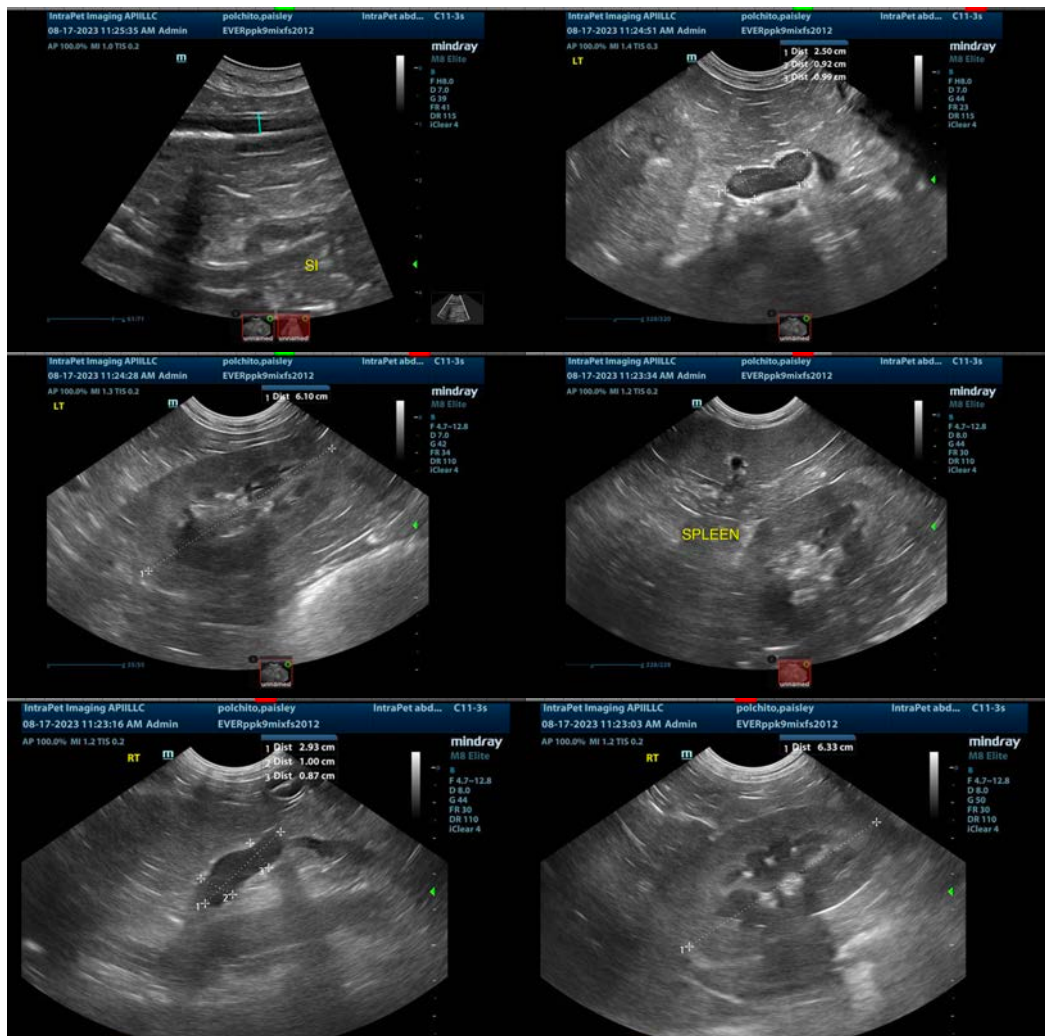
ULTRASONOGRAPHIC FINDINGS

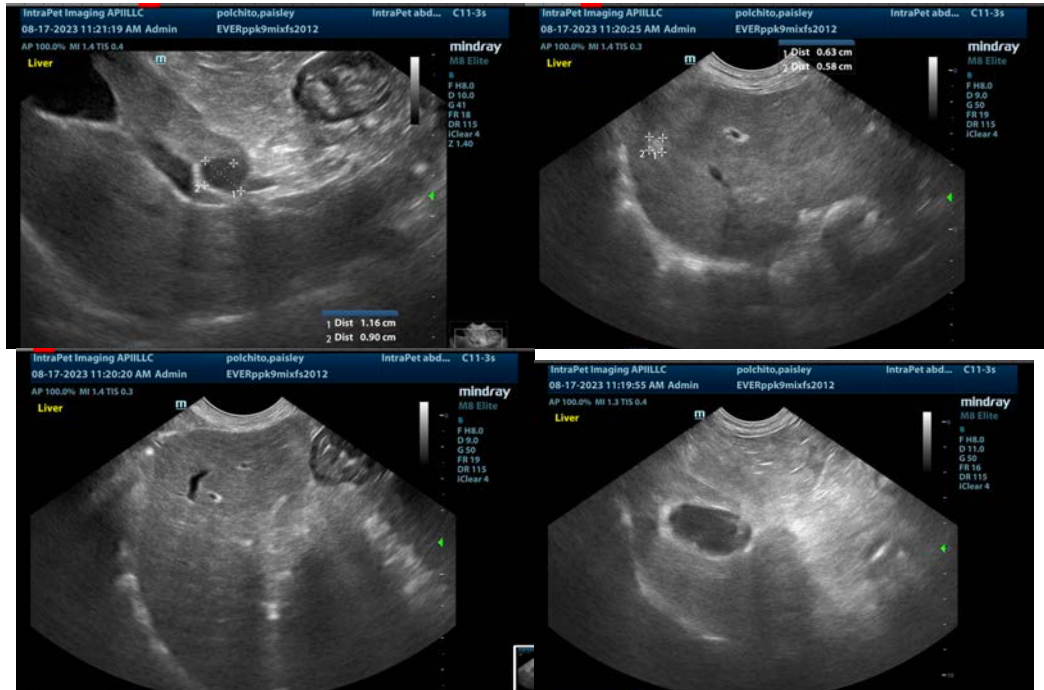
- Bilateral adrenomegaly – The bilateral adrenomegaly could be consistent with bilateral hyperplasia (e.g., secondary to pituitary-dependent hyperadrenocorticism), bilateral infiltrative neoplasia, inflammatory adrenal disease, other. Correlation with clinical findings is recommended.
- Large, heterogeneous liver with a hyper- and hypoechoic nodule – The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy. The nature of the nodules is uncertain. The appearance of the hyperechoic nodule trends towards a benign lesion. Continued monitoring of the nodule near the gallbladder neck is warranted, as it is slightly more prominent and in a difficult area to sample.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Based on today's evaluation, the appearance of the liver and adrenal glands could be consistent with a diagnosis of pituitary dependent hyperadrenocorticism. Consider repeat adrenal function testing. If cortisol levels are normal and Cushing's is strongly suspected, you could consider an adrenal panel to the University of Tennessee, looking for evidence of elevation of atypical hormones (atypical Cushing's disease).

There is a small hypoechoic nodule visualized near the gallbladder neck. Recommend continued monitoring of this lesion for progression, as this is in an area that would be difficult to sample.





The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. 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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