**DATE PRESENTING CLINICAL SIGNS**

2/10/2022 History: Well managed Cushing's, asymptomatic heart murmur without medications. Pet had Bilroth surgery in 2/2021 for suspected pyloric mass causing several weeks of bloating and inappetence. Currently doing well but worsening liver value elevation. Also screening for current heart status.

**PATIENT**

Popi Wallace Current Medications: Trilostane 5.5 mg SID (> 2 years), Pepcid 2.5 mg.  
Lab Results: BID1/15/22 ACTH stim: cortisol pre 5.8, post 5.6. ALKP 1695, glu 231, chol 516, trig 515, PSL 358, USG 1.036, 3+ protein, 3+ glucose. 5/29/21: ALKP 513, glu 192, chol 367, USG 1.036, 2+ protein, no glucose. 1/23/21 ACTH stim: cortisol pre 5, post 8.5, ALKP 2346, glu 298, chol 520, trig 346, PSL 538, USG 1.020, 2+ protein no glucose. Normal T4

**SPECIES**

Canine Date of Previous IntraPet Ultrasound: echo 1/22/21, 6/1/20, 2/1/18, abdominal 2/4/21, bicavitory 3/24/19.

**BREED**

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Stephanie Pearce RDCS, RVT.

Chihuahua Mix

**SEX****ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

Male Neutered

**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 mostly 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**

3-14-2008

**WEIGHT**

13.16 Lbs.

The prostate is normal in size (0.85 cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

**INTERPRETED BY**

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

The left kidney is normal size (4.68 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. A thin hyperechoic medullary band is observed adjacent to the corticomedullary junction. Mild pyelectasia is present (0.22 cm in the longitudinal plane). There is no evidence of nephroliths, infarcts or hydronephrosis. Renal vasculature is normal.

The right kidney is normal size (4.62 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. A thin hyperechoic medullary band is observed adjacent to the corticomedullary junction. Trace pyelectasia is present (0.16 cm in the longitudinal plane). There is no evidence of nephroliths, infarcts or hydronephrosis. Renal vasculature is normal.

**HOSPITAL NAME**

Everhart Veterinary  
Hospital

**Adrenal Glands**

The left adrenal gland is enlarged (0.65 cm at cranial pole) (0.82 cm at caudal pole) (1.90 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. Notarangelo

The right adrenal gland is enlarged (0.66 cm at cranial pole) (0.83 cm at caudal pole) (2.04 cm in length); with a slightly irregular shape. The parenchyma is mildly heterogenous with a 0.24 cm hypoechoic nodule at the caudal aspect. There is some loss of glandular detail. The phrenicoabdominal vein and surrounding vasculature are normal.

**INVOICE**

10338

### ***Spleen***

Previously splenectomized. No obvious lesions are observed within the region of the splenic fossa.

### ***Liver***

The liver is subjectively prominent in size with swollen curvilinear peripheral contours. The parenchyma is isoechoic relative to the spleen and exhibits mild heterogeneity. No distinct focal lesions are observed. Hepatic vasculature 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 to moderate amount of partially dependent aggregated, echogenic debris/sludge is observed within the lumen. The cystic and common bile ducts are normal.

### ***Gastrointestinal***

The gastric lumen is mildly fluid distended. The gastric wall in the region of the fundus is normal in thickness with a normal layering pattern. In the region of the pyloric antrum, the wall is mildly to moderately thickened (up to 0.77 cm), with retention of the normal layering pattern. The previous Bilroth surgery site is as expected. 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. There is no evidence of an obstructive pattern.

### ***Pancreas***

The base/right limb are prominent in size with slightly irregular peripheral contours. The parenchyma is hypoechoic relative to surrounding omental fat and subtly mottled in appearance. No distinct focal lesions are observed. The pancreatic duct is not overtly dilated. The mesentery effacing the serosal surface is slightly hyperechoic. 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**

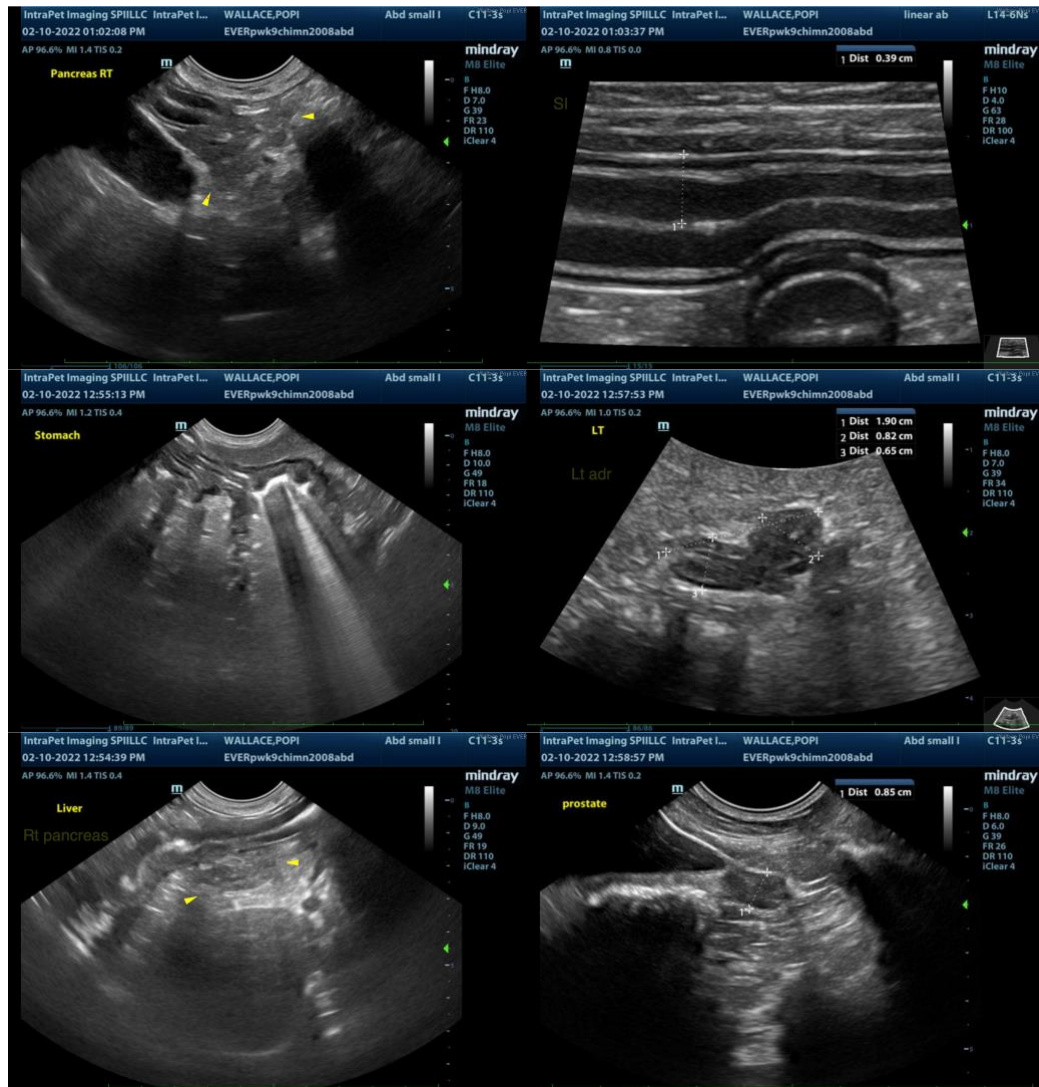
- Non-specific diffuse hepatopathy, suspected to be benign, particularly in light of the normal ALT
- Regenerative nodular hyperplasia and vacuolar hepatopathy are the top differentials.
- Gall bladder debris/sludge

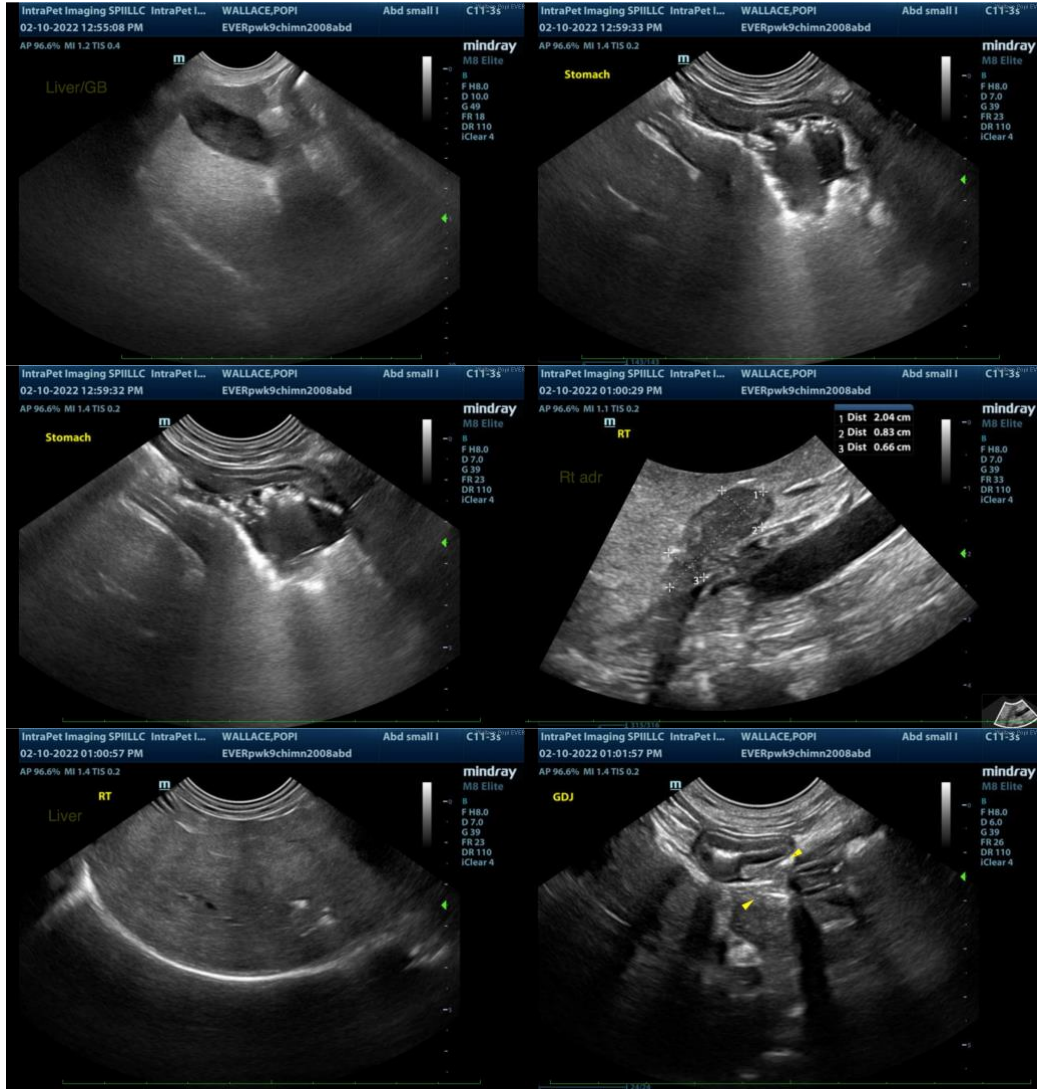
### **Secondary Findings**

- Bilateral degenerative renal changes with mild pyelectasia
- Bilateral adrenomegaly, consistent with a previous diagnosis of pituitary-dependent hyperadrenocorticism.
- Pancreatic changes are suggestive of chronic +/- active pancreatitis with age-related remodeling.

## 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 ultrasound +/- hepatic tissue sampling may be warranted.
- Given the persistent hyperglycemia and recent glucosuria, a serum fructosamine level is recommended to assess for the presence of diabetes mellitus.
- Given the likelihood of chronic pancreatitis, a prescription low-fat diet is recommended to help prevent flareups.





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.

**Andrea Nicastro, DVM, Diplomate DACVIM (Small Animal Internal Medicine)**  
[info@SonoPath.com](mailto:info@SonoPath.com)