

**DATE PRESENTING CLINICAL SIGNS**

7/28/23

Patient was examined on 7/20/23 due to an episode of stumbling (with head cocked sideways) the night before.

**PATIENT**

Tucker Cassel

Current Medications: None.  
Lab Results: Increased ALP @ 489, cholesterol elevated.  
Radiographs: Liver large.

**SPECIES**

Canine

Date of Previous IntraPet Ultrasound: No previous.  
Sedation: Not required to complete full diagnostic ultrasound.  
Stat Report: Not requested.  
Imaging Performed By: Stephanie Warga RDCS, RVT.

**BREED**

Terrier x

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

Neutered Male

**Urinary System**

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 were noted. Ureteral papillae were normal.

**AGE**

8/1/12

The **kidneys** revealed largely normal size and structure, corticomedullary definition and ratio (cortex 1/3 of medulla) were essentially maintained with some age-related loss of curvilinear patterns regarding the capsule and C/M junction. The cortices presented largely uniform texture with some increased echogenicity expected for his age patient. Medullary structure differed distinctly from that of the cortex and no evidence of pelvic dilation was present. The right kidney measured 5.55 cm. The left kidney measured 5.43 cm.

**WEIGHT**

23.4 Pounds

**Adrenal Glands****INTERPRETED BY**Eric Lindquist, DMV  
DABVP, Cert. IVUSS

The **adrenal glands** appeared slightly enlarged and swollen. No evidence of focal capsular expansion or invasion into the phrenic veins were noted. No overt suspicion of neoplasia was noted. This is considered likely a hyperplastic change associated with stress or adrenal endocrinopathy (PDH). If isosthenuria is persistently present and the patient morphologically suggests Cushing's disease then ACTH testing would be indicated. The right adrenal gland measured 2.02 cm x 0.95 cm at the caudal pole and 0.86 cm at the cranial pole. The left adrenal gland measured 2.74 cm x 0.79 cm at the caudal pole and 0.59 cm at the cranial pole.

**HOSPITAL NAME**

Greenbrier Vet Clinic

**Spleen**

The **spleen** presented a smooth homogeneous parenchyma hyperechoic to liver and renal cortical parenchyma. The capsule was smooth without noticeable expansion or deviation from within the spleen or adjacent pathology. The splenic vasculature demonstrated normal volume without signs of congestion or thrombosis. No sonographic evidence of acute or chronic inflammatory, neoplastic, or infarctual changes were noted.

**REFERRING VET**

Dr. Streett

**INVOICE**

44466

**Liver**

The **liver** was uniformly swollen with minor, excessive gallbladder debris and over distension with dependent and suspended bile without evidence of overt mucocele formation. However, excessive sludge was present. The liver presented coarse architecture with mildly increased portal markings and subtle, mixed echogenic changes. This is consistent with vacuolar hepatopathy and some level of remodeling and history of inflammatory component.

A right cranial 2.8 cm x 2.15 cm mass was noted between the portal vein and vena cava. The mass appears to be possibly invading the vena cava. Vena cava in-flow does not appear to be overtly affected. Possibility of benign hyperplasia in this case.

### ***Gastrointestinal***

Examination of the **gastrointestinal tract** revealed a stomach and intestine free of stasis, of normal wall thickness, acceptable curvilinear mural detail, and peristaltic activity. 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. Some parenchymal remodeling, however, with mild deviation from curvilinear normalcy was observed. Pancreatic duct and capsular irregularities were present consistent with age related changes. If pain upon imaging (+ Murphy sign) was present or if the patient is focally painful in subxyphoid palpation then low-grade smoldering chronic pancreatitis should be suspected.

## **ULTRASONOGRAPHIC FINDINGS**

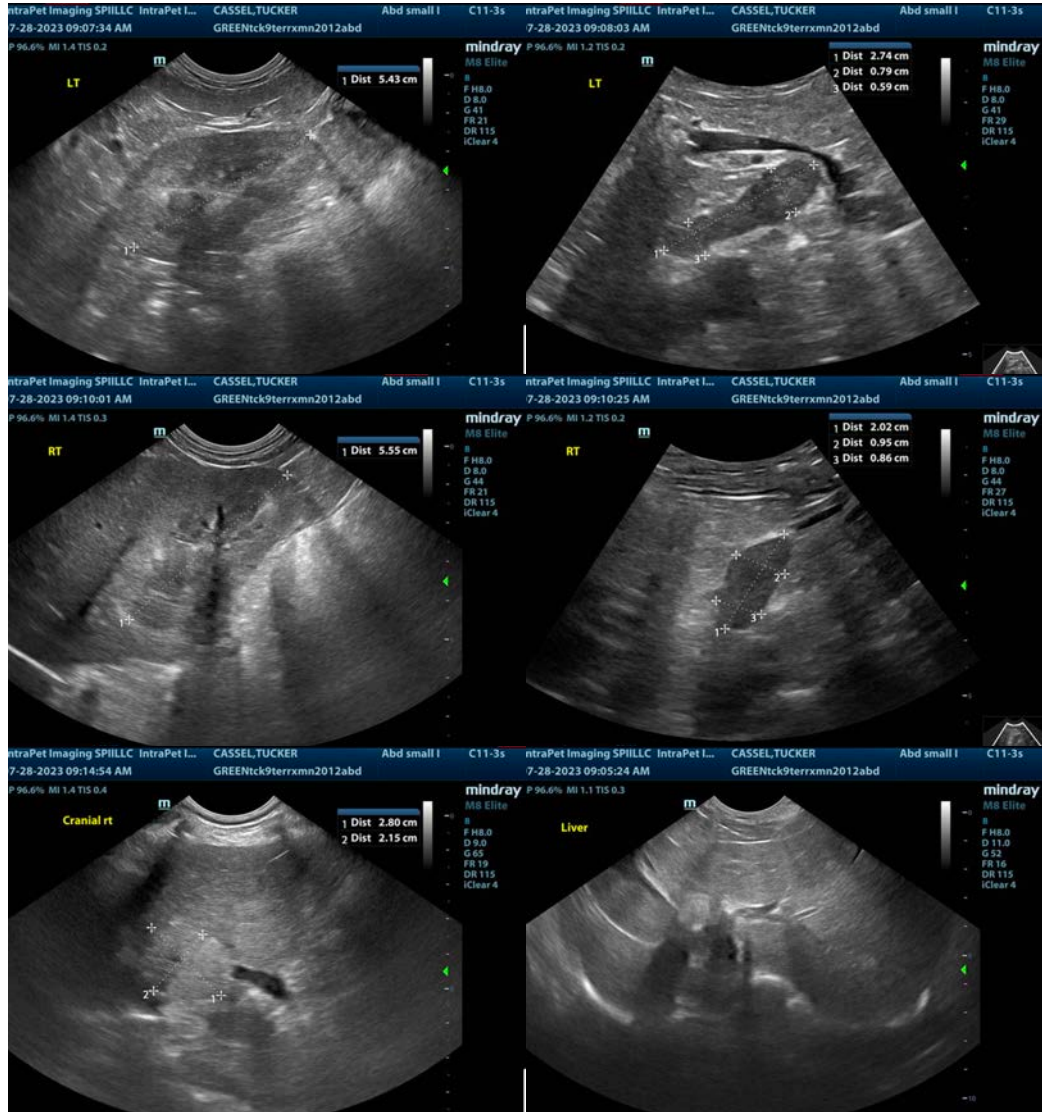
- Mass in the area of the vena cava and portal vein
- Vacuolar hepatopathy liver pattern
- Bilateral adrenal hypertrophy
- Age related renal and pancreatic changes

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

The mass is in a difficult area to sample. CT evaluation warranted. Hyperplasia versus carcinoma are primary concerns. Give the patient history, recommend skull CT with contrast as well as blood pressure measurements to assess for other causes, as the hepatic nodule may be incidental and benign.

**Radiographs: Hepatomegaly with irregular 2.0 cm density.**





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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