

**DATE**

4/4/22

**PRESENTING CLINICAL SIGNS**

Elevated liver values, unregulated glucose levels.  
Current Medications: Herbal supports, 1 unit Hemalin BID.  
Lab Results: See attached.

**PATIENT**

Happy Calpeno

Date of Previous IntraPet Ultrasound: May 2016. See attached.  
Sedation: Oral Gabapentin/Trazadone PO. Additional sedation declined, DVM informed patient would require sedation due to vocalizing and mobility.  
Stat Report: Not requested.

**SPECIES**

Canine

Imaging Performed By: Stephanie Pearce RDCS, RVT.

**BREED**

Chihuahua

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**\*\*Resolution was marginal owing to the patient's demeanor and body movement; however, evaluation is based on the diagnostic image set provided.**

**SEX**

Spayed Female

**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 was noted. Ureteral papillae were normal.

**AGE**

8/5/05

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 this age patient. Medullary structure differed distinctly from that of the cortex. The right kidney measured 4.37 cm. The left kidney revealed slight pyelectasia. The left kidney measured 3.75 cm.

**WEIGHT**

8.7 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 right adrenal gland measured 1.88 x 0.38 cm at the caudal pole and 0.35 cm at the cranial pole. The left adrenal gland measured 1.14 x 0.46 cm at the caudal pole and 0.37 cm at the cranial pole.

**INTERPRETED BY**Eric Lindquist, DMV  
DABVP, Cert. IVUSS**HOSPITAL NAME**

Happy Tails VH

**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 was noted.

**REFERRING VET**

Dr. Calpeno

**INVOICE**

98028

**Liver**

The **liver** was uniformly swollen with minor, excessive gallbladder sand and non-obstructive calculi. 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. There was no overt suspicion of neoplasia.

**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. Transit of chyme was unremarkable.

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 subxiphoid palpation then low-grade smoldering chronic pancreatitis should be suspected.

### **ULTRASONOGRAPHIC FINDINGS**

Metabolic hepatopathy pattern with gallbladder calculi.  
Otherwise, geriatric abdomen.

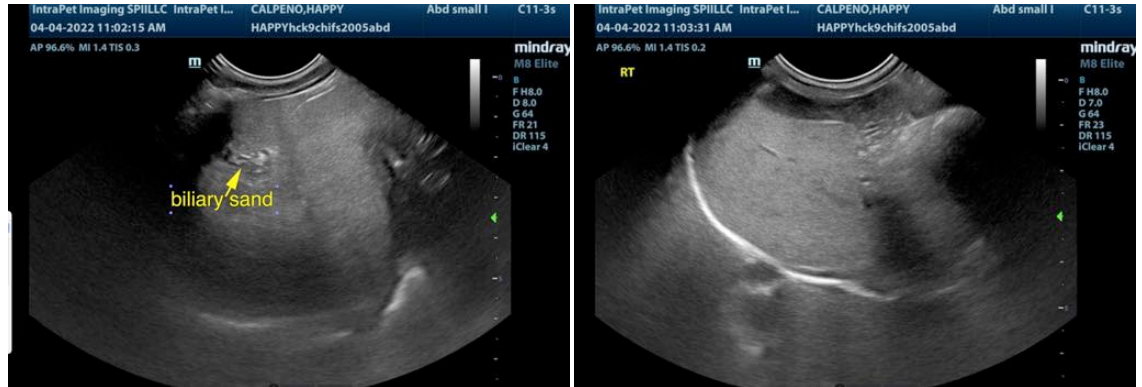
### **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

\*\*\* Lack of adequate patient sedation (offered, but declined) can hinder ultrasound imaging. If additional imaging is required sedation will be necessary

FNA of the liver could be considered for further definition, yet appears to be benign. Ursodiol therapy is warranted in an attempt to dissolve the biliary sand and small, non-obstructive calculi. A recheck sonogram is recommended in 8 weeks after initiating Ursodiol therapy.







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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