

**DATE**

8/26/21

**PRESENTING CLINICAL SIGNS**

Diagnosed with elevated AST and ALT last year. Still elevated on BW this year, but slightly lower. Eating great, but occasional polyuria.

Current Medications: None currently.

**PATIENT**

Lab Results: 12/20/20: AST 155 (10-100), ALT 345 (10-100). 8/14/21: AST 131, ALT 229.

Freya Buck

Date of Previous IntraPet Ultrasound: No previous

Sedation: not needed

Stat Report: not requested

**SPECIES**

Feline

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

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.

Bengal

**SEX**

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 and no evidence of pelvic dilation was present. Slight mineralization was noted in the kidneys. The right kidney measured 3.6 cm. The left kidney measured 3.74 cm.

Spayed Female

**AGE**

2010

**WEIGHT**

7.1 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.

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**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.

**HOSPITAL NAME**

Healing Paws VC

**REFERRING VET**

Dr. Preston

**Liver**

The **liver** images submitted revealed subjectively normal liver size, contour, and structure. Parenchymal echogenicity was naturally coarse and hypoechoic to the spleen. Vascular and biliary tracts were of normal volume with no evidence of congestion. The gallbladder presented a minor amount of debris and tortuous cystic duct. Minor biliary congestion was noted.

**INVOICE**

91542

**Gastrointestinal**

The **gastrointestinal** presentation revealed mild uniform prominence of the gastric mucosa as well as areas of "ropey" small intestinal wall with slight disruption of the normal 1:3 muscularis/mucosal ratio. The intestinal submucosa was slightly irregular, thickened and hyperechoic suggestive of low grade, chronic disease. Maximum wall thickness measured 0.28 cm. No concerning lymphadenopathy was visible. No evidence of obstruction was present. Chronic inflammatory bowel disease is likely with a low possibility of an early neoplastic event such as lymphoma. Full thickness tissue biopsies via open laparotomy, ideally guided by

intraoperative ultrasound in order to obtain the most representative mural sample, would be necessary to rule out this possibility.

### **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. The left limb of the pancreas measured 0.87 cm. Slight pancreatic duct dilation was noted and measured 0.16 cm.

### **ULTRASONOGRAPHIC FINDINGS**

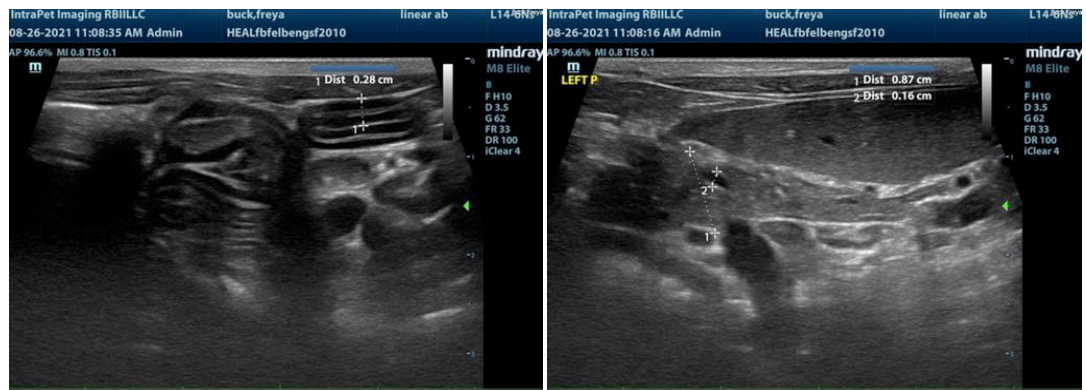
Chronic IBD gastrointestinal pattern with mild chronic pancreatic changes.  
Low-grade inflammatory hepatopathy, minor excessive debris.

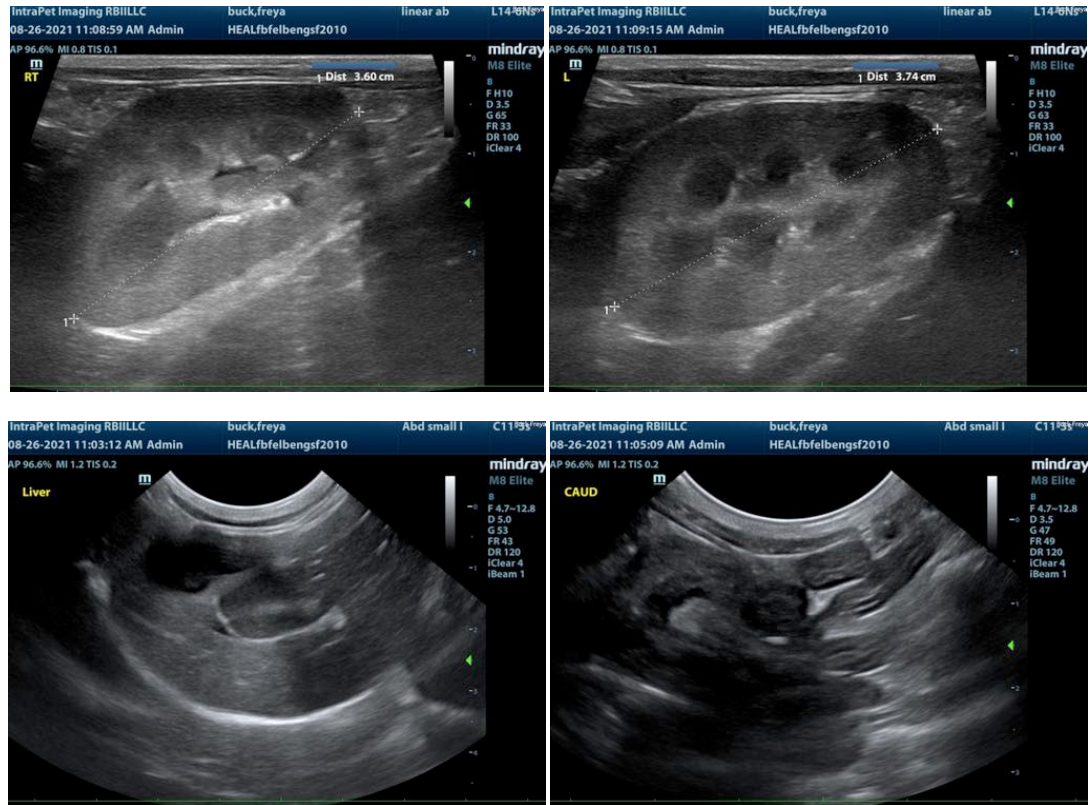
### **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

There is no evidence of neoplasia. A clinical trial of the following may prove effective. Ursodiol is recommended over the next 6 weeks with a recheck sonogram at that time or earlier if any weight loss occurs or clinical signs are present.

### **Triaditis/Pancreatitis protocol**

Part or all of this protocol may be considered based on your clinical impression of the patient: Recommend pain management when anorexic with **Buprenorphine** (0.01-0.02 mg/kg IM or SC), clinical trial of **Zithromax** (50 mg sid/cat x 10 days, 3 weeks if bartonella +), **Prednisolone** (0.5-2 mg/kg tapering over 1 week to minimal effective dose), and **B12 injections** if weight loss (Cyanobalamine 250 mcg sub-q once-weekly x six weeks, then every other week for six weeks and then once-monthly, long-term if necessary), **novel-protein or hydrolyzed diet** (*Hydrolyzed diets have been shown to be more effective in dietary intolerance case management compared to hypoallergenic diets*) or the **magical Purina DM** (changing protein source is crucial and may need rotation every 6 months if clinical signs recur) Diet trials is a whatever works phenomenon. If vomiting becomes a persistent issue then endoscopy would be warranted and/or recheck sonogram to assess more emerging disease. One diet does not work for all patients so different trials may be necessary or protein source rotation every 6 months as new sensitivities develop.





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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