

**DATE PRESENTING CLINICAL SIGNS**

1/21/22

History: Presenting Complaint: Vomiting; Not Eating. Date: 01-19-2022 Notes: Toby is a 4 y/o MN Shih Tzu who was referred for elevated liver values - coughing and vomiting at home - 5am yesterday vomited twice mostly food - passed a small amount of firm feces yesterday - very lethargic, exercise intolerant, did not want to go for walk - not interested in eating, and barely drinking - no further vomiting today, no diarrhea, no change in urination - last meal was 2 days ago - was rescued from a shelter, was thought be to 8 months old and had grade II/VI murmur - could be older, ophthalmologist thought he was closer to 7 or 8 y/o - no known FB or toxin ingestion. Medications: - none - monthly preventatives. Assessment: Elevated liver values (Hepatitis vs cholangiohepatitis vs cholestasis vs neoplasia vs pancreatitis vs anaphylaxis vs toxin vs other). Plan: Recommended hospitalization, IVF, Liver panel, bile acids, and AUS ultimately. Discussed potential need for ammonia levels, coagulation times, other infectious disease testing. Discussed differentials including hepatitis, cholestasis, pancreatitis, neoplasia, anaphylaxis ect. Vitals are stable at this time, risk we may be early in disease and may get worse before it gets better. O elects to move forward with treatment plan.

**PATIENT**

Toby Hart

**SPECIES**

Canine

**BREED**

Shih Tzu X

**SEX**

Neutered Male

**AGE**

3/30/17

**WEIGHT**

10.7 Pounds

**INTERPRETED BY**Eric Lindquist, DMV  
DABVP, Cert. IVUSS**IMAGING PERFORMED BY**

Rachel Brilhart RDMS

**HOSPITAL NAME**Animal Emergency  
Hospital**REFERRING VET**

Dr. Thompson

**INVOICE**

35033

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****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.

The **kidneys** revealed normal size and structure, corticomedullary definition and ratio for this age. The cortices presented largely uniform texture with normal echogenic relationship to liver and spleen. Medullary structure differed distinctly from the cortex and no evidence of pelvic dilation was present. The capsules were acceptably uniform without significant irregularities. The right kidney measured 3.32 cm. The left kidney measured 3.69 cm.

**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 1.07 cm x 0.47 cm at the cranial pole and 0.52 cm at the caudal pole. The left adrenal gland measured 1.43 cm x 0.42 cm at the cranial pole and 0.57 cm at the caudal pole.

**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.

## Liver

The liver presented slight coarse architecture and minor increased portal markings. The gallbladder was unremarkable.

## 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

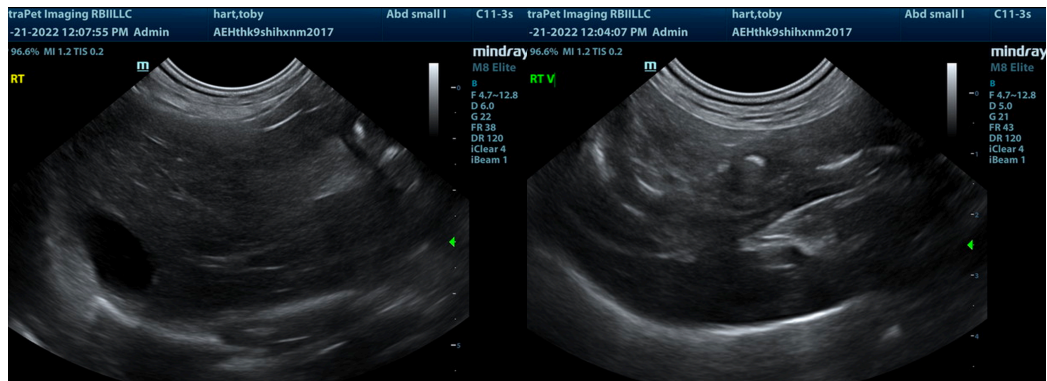
The pancreas revealed minor heterogeneous parenchymal changes. The right limb measured 1.4 cm. History of pancreatitis likely.

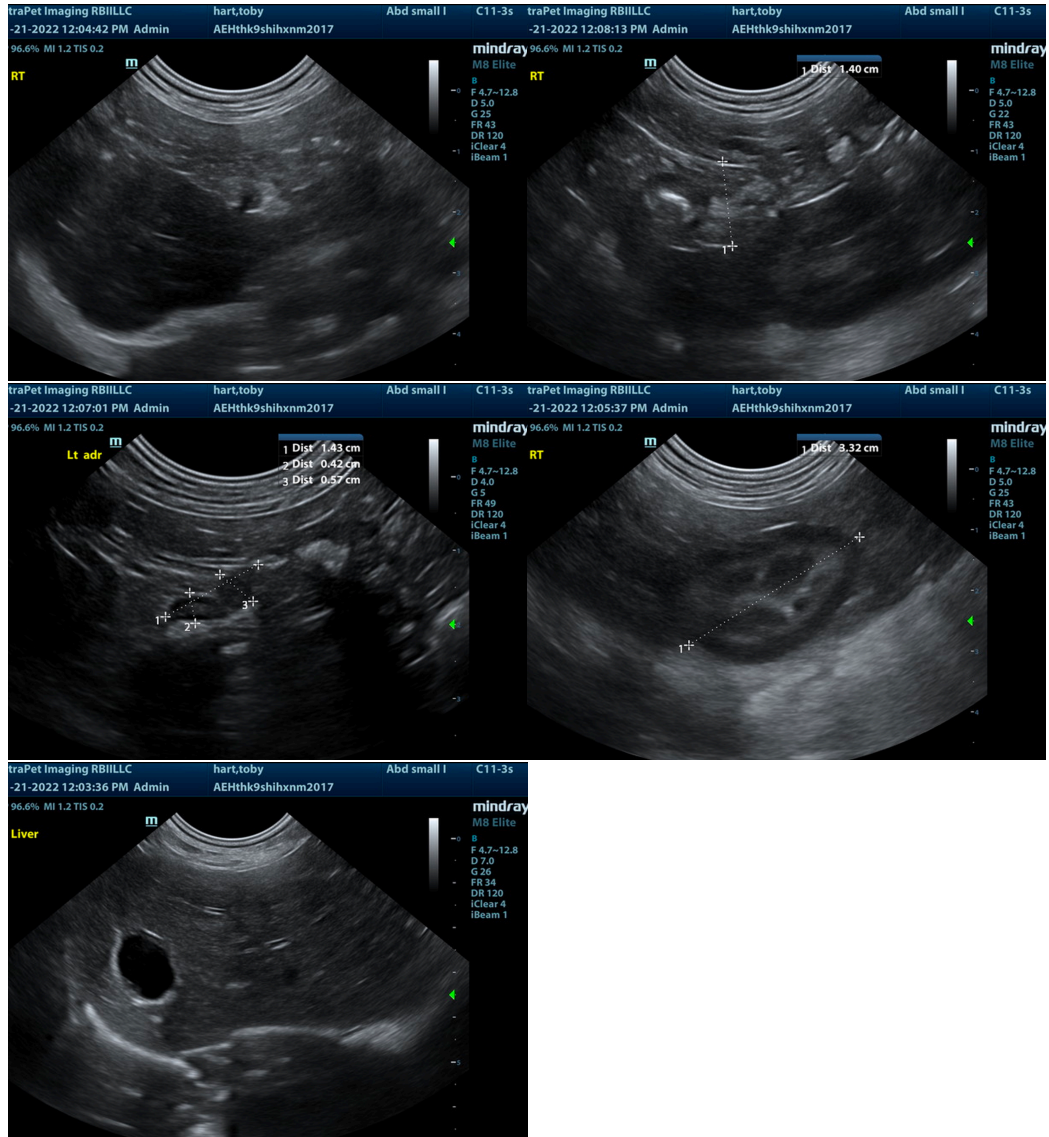
## ULTRASONOGRAPHIC FINDINGS

- Non-specific inflammatory hepatopathy
- Minor pancreatic remodeling – possible low-grade inflammation

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Subxiphoid palpation is recommended to assess for pain or discomfort associated with the pancreas. FNA of the liver would be indicated for further definition. No evidence of intrahepatic or extrahepatic shunting. Liver size appeared fairly normal.





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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