



**PATIENT PRESENTING CLINICAL SIGNS**

Tucker Hyer History: WEIGHT LOSS, ARTHRITIC GALLIPRANT  
 Labs: ALT 140

**SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

Canine **Urinary System**

**BREED** The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 4.0 cm exhibited normal thickness and tone. Anechoic urine was present in the lumen with no uroliths or sediment. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes were noted. Aortic trifurcation was normal.

**SEX** The residual prostate was free of pathology.

Neutered Male Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio was maintained. The medulla and cortices were uniform in texture with some increased echogenicity and mild loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. The left kidney measured 5.6 cm in length. The right kidney measured 5.4 cm in length.

**AGE**  
 2011 **Adrenal Glands**

**WEIGHT** The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.63 cm width at the caudal pole and 0.41 cm width at the cranial pole.

41.6 Pounds The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.54 cm width at the caudal pole.

**INTERPRETED BY**  
 R. McKenzie Daniel,  
 DVM, DABVP  
 (Canine and Feline) **Spleen**

**IMAGING PERFORMED BY** The spleen exhibited a finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. The capsule was smooth and regular without apparent expansion. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis. Acute to chronic inflammatory or benign parenchyma changes were not noted. Areas of mildly hyperechoic medial parenchyma were noted, adjacent to the hilus, which may indicate minor benign to emerging myelolipomas or potential areas of medial capsule fibrosis. No overt evidence of splenic neoplastic criteria.

Rebekah Jakum, CVT  
 ARDMS/RVT **Liver**

**HOSPITAL NAME** St. Francis AH The liver was subjectively normal in size, structure, and contour. The liver parenchyma was mildly nonuniform and hypoechoic to the spleen with a moderate coarse echotexture and subjective mild to benign parenchymal remodeling. The hepatic and portal vasculature were normal in appearance without signs of congestion. Possible mild caudate lobar swelling. The caudate lobe potentially measured 7.0 cm – 8.0 cm.

**REFERRING VET** Dr. Carpenter

**INVOICE** The gallbladder was non distended in size with moderate, nondependent, mildly congealed gallbladder debris, primarily in the mid to caudal lumen and gallbladder neck. The gallbladder was otherwise normal. The cystic duct and common bile ducts were normal without evidence of dilation.

14141

**DATE** **Gastrointestinal**

3/2/22



**PATIENT**

Tucker Hyer

The stomach exhibited prominent to mildly hypoechoic wall layering, exhibiting indistinct wall layer detail. The stomach was moderately distended with retained anechoic fluid, gas and potential for mild nonspecific hyperechoic ingesta. The ventral gastric body wall measured 0.76 cm. The pylorus wall measured 0.57 cm. Overt evidence of mechanical pyloric outflow obstruction was not noted.

**SPECIES**

Canine

The duodenum exhibited intact yet subjective mild prominent wall layering with subjective areas of upper to mid duodenal corrugation. The duodenum wall measured 0.53 cm. The jejunum and ileum, to the level of the colon, were sonographically unremarkable.

**BREED**

Mix

Normal visible colon wall layers were present with apparent formed feces in lumen.

**SEX**

Neutered Male

**Pancreas**

The pancreas exhibited potential for mildly hypoechoic parenchyma compared to adjacent peripancreatic and perigastric omentum.

**Free Abdomen**

**AGE**

2011

Subtle regional perigastric reactive mesentery was present. No free fluid was noted.

**ULTRASONOGRAPHIC FINDINGS**

**WEIGHT**

41.6 Pounds

- Hypomotile stomach, exhibiting prominent to hypoechoic walls and moderate retained fluid, gas and potential for mild nonspecific ingesta
- Duodenitis
- Possible mild pancreatitis
- Moderate gallbladder debris (non-mucocele)
- Subjective, nonspecific, caudate lobar swelling

**INTERPRETED BY**

R. McKenzie Daniel,  
 DVM, DABVP  
 (Canine and Feline)

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**IMAGING PERFORMED BY**

Rebekah Jakum, CVT  
 ARDMS/RVT

Given the lack of reported gastrointestinal signs (i.e., vomiting, anorexia) with only weight loss, the presentation of the stomach and duodenum is nonspecific. This presentation may indicate gastroduodenitis with metabolic gastrophypomotility. The possibility of early infiltrative gastric or gastroduodenal mural disease cannot be excluded.

**HOSPITAL NAME**

St. Francis AH

Further assessment may include GI panel, to include PLI, TLI, cobalamin and folate as well as three-view chest radiographs to rule out occult thoracic pathology as contributing factors to the patients weight loss. If accessible, ultrasound guided FNA of the subjective caudate liver lobe for screening cytology could be considered, although this finding was not overtly consistent with neoplastic criteria.

**REFERRING VET**

Dr. Carpenter

Some or all of the following protocol may be considered empirically, if clinically indicated. Endoscopic gastrointestinal biopsies would likely be ideal for further clarification.

**INVOICE**

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**Helicobacter/Gastritis protocol**

**DATE**

3/2/22

A clinical trial of **Zithromax (Dogs: 5-10 mg/kg p.o. q24h. May increase dosing interval to q48h after 3-5 days of treatment), Metronidazole (10-20 mg/kg p.o. b.i.d.), Pepcid (0.5-1 mg/kg s.i.d.)** and



**PATIENT**

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**SPECIES**

Canine

**BREED**

Mix

**SEX**

Neutered Male

**AGE**

2011

**WEIGHT**

41.6 Pounds

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**REFERRING VET**

Dr. Carpenter

**INVOICE**

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**DATE**

3/2/22

**Sucralfate** (0.5-2 g/dog PO) or **Omeprazole** (1 mg/kg p.o. s.i.d.) over the next 3 weeks along with a **novel-protein or hydrolyzed diet** with slurry feeding b.i.d./t.i.d. over the next 2-4 days and then increase to canned diet bid. Dry food should be avoided over the next 4 weeks. A recheck sonogram to assess GI improvement or progression would be ideal in 4 weeks.





**PATIENT**

Tucker Hyer

**SPECIES**

Canine

**BREED**

Mix

**SEX**

Neutered Male

**AGE**

2011

**WEIGHT**

41.6 Pounds



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.

**INTERPRETED BY**

R. McKenzie Daniel,  
DVM, DABVP  
(Canine and Feline)

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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