



PATIENT

Toby Penner

SPECIES

Canine

BREED

Maltese cross

SEX

Neutered male

AGE

1 years

WEIGHT

4.5 kg

PRESENTING CLINICAL SIGNS

History: Young patient with chronic elevation of pancreatic enzymes and abnormal in house SNAP cPL. Patient is currently clinically doing well with only intermittent vomiting and a good appetite. When originally presented several months ago had symptoms of pancreatitis (vomiting/diarrhea/abdominal pain).

Abnormal PE/Chem/CBC/UA Results: Chronic elevation of pancreatic enzymes and abnormal in house SNAP cPL. Spec cPL within normal limits. TLI elevation (ruled out pancreatic enzyme insufficiency). Normal cobalamin and folate levels.

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 was 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. Slight mineralization was noted in the kidneys. The left kidney measured 3.2 cm. The right kidney measured 3.2 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 left adrenal gland measured 0.4 cm. The right adrenal gland measured 0.5 cm.

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.

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 acceptably thin walls with primarily anechoic content. The cystic and common bile ducts were normal. No pathological hepatic lymphadenopathy was evident. No overt structural evidence of inflammatory, infiltrative or regenerative pathology was evident.

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Dr. Ward

HOSPITAL NAME

Kenora VC

REFERRING VET

Dr. Ward

INVOICE

43804

DATE

4/11/23



PATIENT

Gastrointestinal

Toby Penner

The **gastric** wall was thickened with no loss of mural detail. The lumen was fluid filled. The mucosa was hypertrophied. The small intestines and colon were unremarkable.

SPECIES

Canine

Pancreas

Minor heterogenous **pancreatic** changes were noted in the right limb.

BREED

Maltese cross

ULTRASONOGRAPHIC FINDINGS

SEX

Neutered male

Minor, degenerative renal changes with slight pinpoint mineralization.

Minor gastritis pattern.

Minor pancreatitis is suspected.

AGE

1 years

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Subxiphoid palpation is recommended in this patient. Underlying dietary intolerance may be an issue in this patient or *Helicobacter*. A clinical trial may prove effective. Otherwise, endoscopy is indicated to obtain mucosal biopsies.

WEIGHT

4.5 kg

Helicobacter/Gastritis protocol

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 **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.

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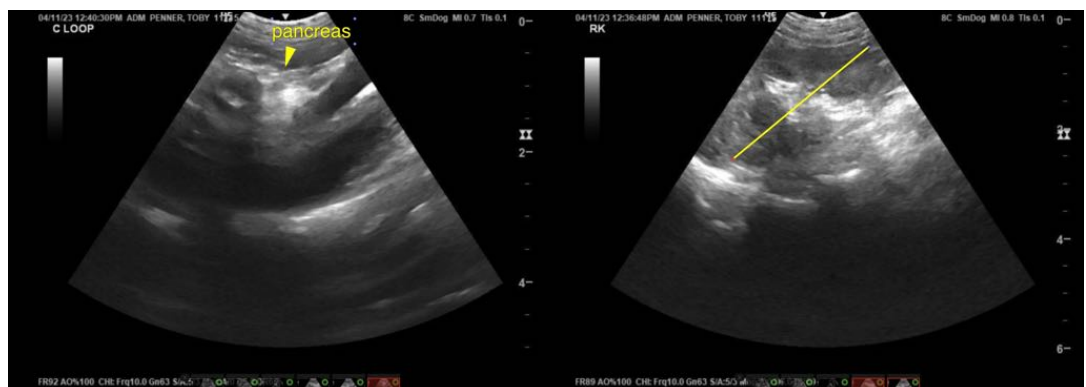
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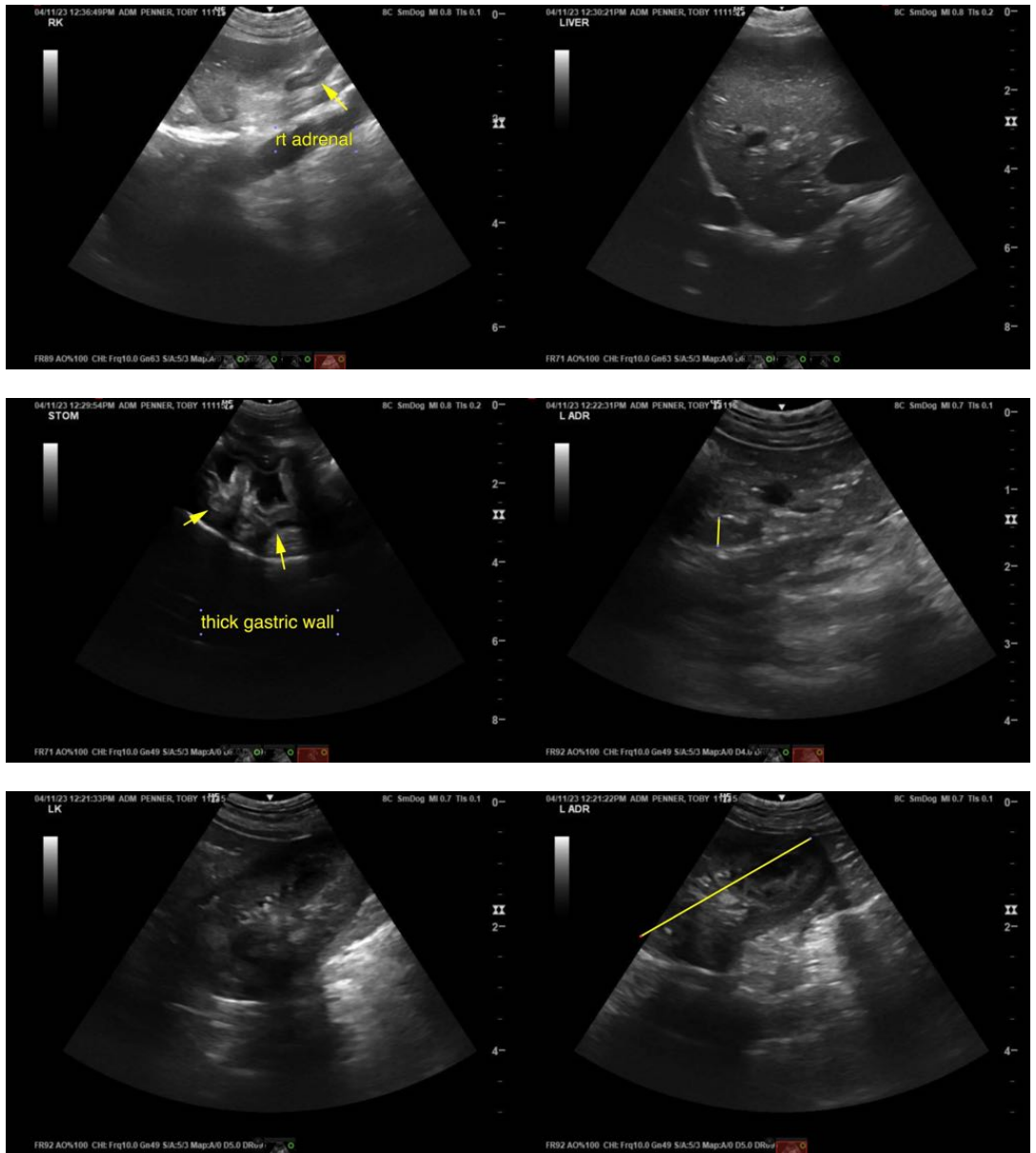
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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