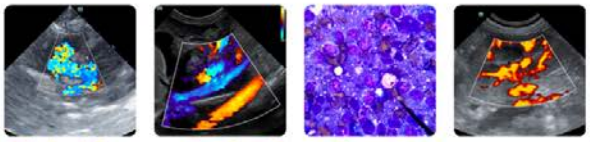


PATIENT

Jaxson Manuck

SPECIES

Canine

BREED

Bulldog

SEX

Neutered Male

AGE

10 Years

WEIGHT

39 kg

INTERPRETED BY

Kathleen Sennello DVM, MS, Diplomate ACVIM (Small Animal Internal Medicine)

IMAGING PERFORMED BY

Dr. Goeres

HOSPITAL NAME

Kelowna Veterinary Hospital

REFERRING VET

Dr. McOnie

INVOICE

71637

DATE

11/6/25

PRESENTING CLINICAL SIGNS

Apparent post prandial pain, diet has been changed several times to various commercial diets. Refuses to lie down, whines and sits up after eating, primarily in the evening after dinner. voracious appetite. has tried salmon with pumpkin and rice, various Acana formulas, lamb and sweet potato, and rice and chicken. Elevated liver enzymes noted July 2025 have increased further. currently on meloxicam and gabapentin for OA. also receives a liver supplement daily given with lunch meat.

Abnormal PE/Chem/CBC/UA Results: Nov 2025: ALKP = 1114 U/L ALT = 557 U/L CHOL = 9.08 mmol/L (2.84 - 8.26) no UA or T4 reported CBC WNL full BW attached morbidly obese, L shoulder end elbow abduction, bilateral stifle CrCL with prior surgical repair. July 2025: ALKP = 768 U/L ALT = 391 U/L

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is moderately distended with anechoic urine. The Bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

The visualized areas of prostate and surrounding tissue appear normal. Unfortunately, the prostate is not fully visualized likely due to its intrapelvic location. Correlate with rectal exam findings.

The left kidney has a normal shape and size (7.52 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (8.26 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

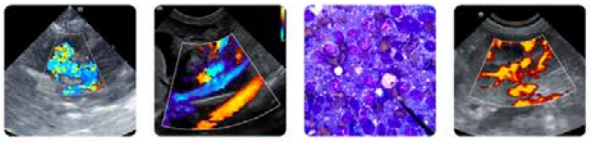
Adrenal Glands

The left adrenal gland is borderline “plump” measuring 0.71 cm at the cranial pole and 0.74 cm at the caudal pole. It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

The right adrenal gland is normal in size measuring 0.56 cm at the cranial pole and 0.70 cm at the caudal pole. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

Spleen

The spleen is subjectively normal in size (1.7 cm), echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.



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Liver

The liver is large in size, and normal in echogenicity with smooth peripheral margins. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. There are occasional ill-defined hypoechoic nodules in the parenchyma, examples measure 1.27 cm and 1.24 cm in diameter.

The gall bladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are mild and likely incidental at this time. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

The stomach contains mild gas and fluid. Generally, the wall appears normal, measuring at 0.41 cm with intact wall layering. There is a focal area that appears somewhat thickened, measuring at 1.05 cm, which I suspect is a rugal fold. The pylorus appears somewhat prominent/thickened, measuring at 0.57 cm with intact wall layering.

The visualized areas of duodenum, jejunum and ileum have a relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. Duodenum wall measures 0.52 cm. Jejunum wall measures 0.49 cm. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

Sections of colon are visualized with formed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

Pancreas

The area of the pancreas is normal and isoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

Free Abdomen

Evaluation of the peritoneal cavity did not reveal any evidence of effusion, or subjective lymphadenomegaly. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of normal uniform echogenicity.

ULTRASONOGRAPHIC FINDINGS

- Large, heterogeneous liver with ill-defined hypoechoic nodules – The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy. The nodules observed trend toward a more benign process, but underlying neoplasia cannot be ruled out.

- Questionable focal thickening of the gastric wall and pylorus – The stomach wall thickening could be consistent with inflammation, edema, infiltrative neoplasia, imaging artifact due to rugal folds, other.

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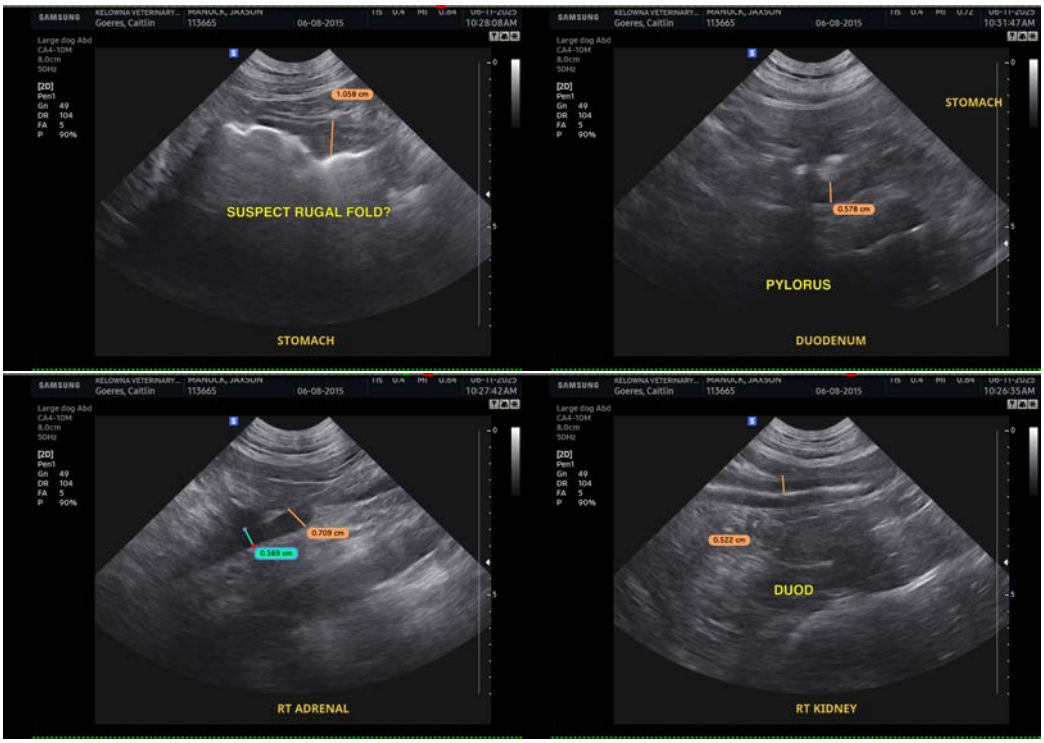
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The liver is large and heterogeneous with ill-defined hypoechoic nodules. This has the appearance most consistent with a vacuolar hepatopathy, although other hepatopathies are possible. If there is concern for a more significant liver disease, consider a liver function test +/- a fine needle aspirate. If there is abnormal liver function or values continue to rise, a biopsy of the liver may eventually be warranted (histopathology, culture and copper levels).

The adrenals are normal/borderline "plump" in size. If symptoms consistent with Cushing's are present, you could consider adrenal function testing.

An obvious cause for the abdominal pain described is not visualized. On some views of the stomach there is some irregularity to the gastric wall. I suspect this is most consistent with rugal folding, but focal thickening cannot be ruled out. You could consider an upper GI endoscopy to further evaluate the esophagus, stomach, pyloric region, etc., and obtain biopsies.

If symptoms are progressive, consider repeat imaging in the future, looking for the development of new lesions or the progression of today's lesions.



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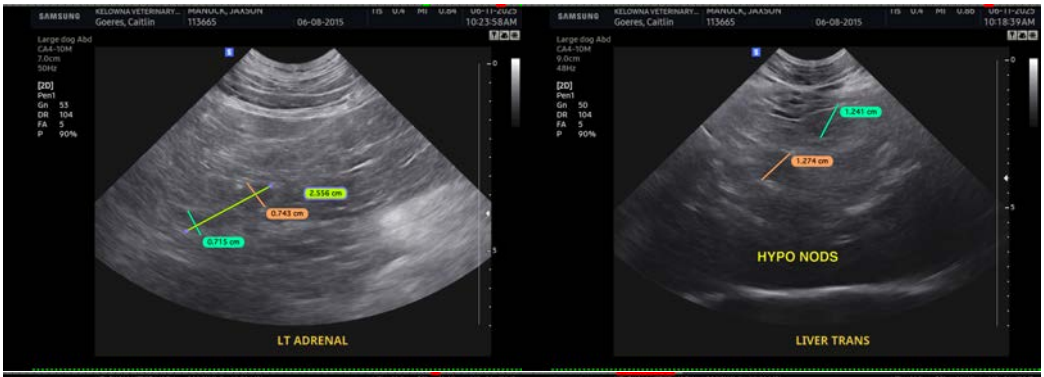

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Kathleen Sennello DVM,MS, Diplomate ACVIM (Small animal Internal Medicine)

info@sonopath.com