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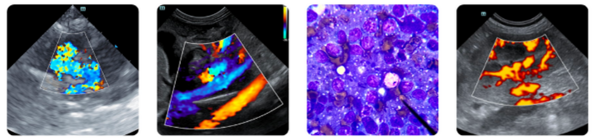


Clinical Sonography & Telecytology
Educational Teleconsultation Services™

PATIENT

Ollie Brown

SPECIES

Canine

BREED

Terrier Mix

SEX

MN

AGE

10 years

WEIGHT

15 kg

INTERPRETED BY

Greg Kuhlman, DVM, DACVIM (SAIM)

IMAGING PERFORMED BY

Dr. Goeres

HOSPITAL NAME

Kelowna Veterinary Hospital

REFERRING VET

Dr. Forwood

INVOICE

11395

DATE

2/27/2026

PRESENTING CLINICAL SIGNS

- Presented yesterday to pDVM for 2 day history of decreased appetite.
- Vomiting last night and some bloody/mucoid stool. Appears weak.
- Tx with cerenia and SQ fluids
- Owner fed some turkey this AM (~5 hrs before AUS)
- Blood work showed a borderline microcytic, normochromic non-regenerative anemia, markedly high ALP (1546 U/L), high lipase and abnormal SNAP cPL. BW showed similar values in October 2025.
- Was diagnosed with pancreatitis in 2020 and has been on Rayne kangaroo low fat since although O does give treats on top of this.

Abnormal PE/Chem/CBC/UA Results: HCT 37% WBCs WNL Lipase 1878 ALP 1546 ALT normal at 65 snap CPL abnormal full BW attached.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The bladder is moderately distended with anechoic urine. No uroliths are seen. The bladder wall is normal in appearance and thickness. No masses are seen. The ureteral papillae is not fully visualized.

The left kidney presents normal size with normal shape and architecture. Normal corticomedullary distinction. There is mild renal pelvic dilatation measuring approximately 2.0 mm, and the collecting ducts appear mildly distended. No pyelectasia or nephrolithiasis. The left kidney measured 4.7 cm in length.

The right kidney presents normal size with normal shape and architecture. Normal corticomedullary distinction. There is mild renal pelvic dilation noted, measuring 3.3 mm, as well as mild collecting duct distension. No pyelectasia or nephrolithiasis. The right kidney measured 4.7 cm in length.

Adrenal Glands

The left adrenal gland presents normal shape and homogenous parenchyma. The phrenic vasculature is unremarkable. The cranial pole measures 6.9 mm and the caudal pole measures 3.8 mm.

The right adrenal gland presents normal shape and homogenous parenchyma. The phrenic vasculature is unremarkable. The cranial pole measures 5.7 mm and the caudal pole measures 6.5 mm.

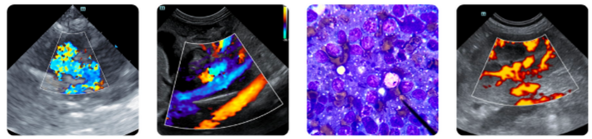
Spleen

The spleen is normal in size, shape, margination and echogenicity. No masses are seen.

Liver

The liver is moderately to markedly enlarged with rounded margins. The parenchyma has a diffuse, hyperechoic echogenicity. No liver masses or lesions are seen. Liver has a uniform echotexture. Intrahepatic bile ducts are normal. Normal vascular pattern.

The gallbladder contains a mild amount of suspended echogenic debris. Normal gallbladder wall. No evidence of bile duct distention or obstruction.



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Gastrointestinal

The stomach and intestines have normal wall layering and thickness. Colon contains normal contents with normal wall thickness.

Pancreas

The visible pancreas is normal in size with normal echogenic parenchyma and surrounded by normal peri-pancreatic mesentery.

Free Abdomen

Mild medial iliac lymphadenopathy noted. An example measures 1.0 cm x 0.6 cm.

ULTRASONOGRAPHIC FINDINGS

- Enlarged, hyperechoic liver. Appears to be due to benign hepatopathy given that the patient has a moderately elevated alkaline phosphatase.
- Incidental gallbladder debris.
- Bilateral mild renal pelvic dilation, and mild collecting duct dilation in the kidneys.
- Enlarged medial iliac lymph nodes.

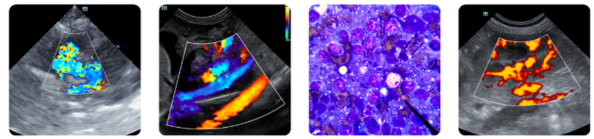
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Recommend screening the patient for secondary causes for hepatopathy. Recommend submitting urine cortisol to creatinine ratio, and if elevated then recommend a low dose dexamethasone suppression test. Recommend fasting triglycerides to screen for hypertriglyceridemia. Full thyroid panel is also recommended to screen for hypothyroidism, and a GI Panel to Texas A&M to screen for occult pancreatic or occult gastrointestinal disease as the cause. All of these recommendations are to screen for causes of elevated alkaline phosphatase in the appearance of the liver, less likely infiltrative neoplasia. If no cause for the elevated alkaline phosphatase is obtained, and enlarged, hyperechoic liver is persistent then I recommend fine needle aspirates for cytology to rule out round cell neoplasia.

The enlarged lymph node, and the changes in the kidneys may indicate occult pyelonephritis. Recommend urinalysis, and culture to screen for occult urinary tract infection. If UTI is ruled out, then it's possible the changes seen in the kidneys may be due to polydipsia. Further workup for polydipsie would then be necessary at that time.

No obvious cause for the patient's mild anemia, and decreased MCV suggesting a microcytic anemia are seen on this exam. The low MCV would suggest possible iron deficiency. Recommend submitting Iron panel to screen for iron deficiency and then supplement if necessary. The patient's anemia is most likely anemia chronic inflammation due to the reported history of chronic intermittent pancreatitis or possible a blood loss anemia, given the low MCV. However, no evidence of blood loss was seen on this exam. May need to screen more globally for possible causes for blood loss anemia.

No immediate cause for the reason acute illness is observed on this exam, other than possible pyelonephritis. If pyelonephritis is ruled out, recommend further workup for the acute illness. Submitting resting cortisol to screen for atypical Addison's is recommended. Prognosis is open pending final determination as to the cause of the patient's comorbidities.



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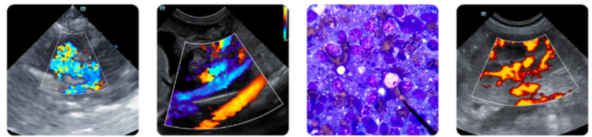

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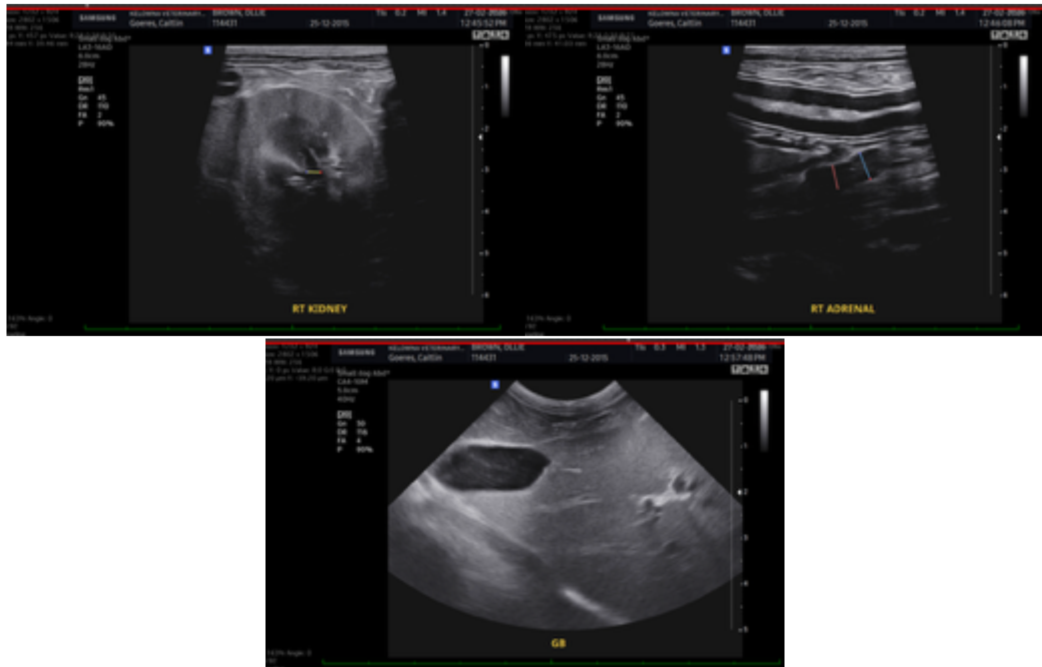

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Greg Kuhlman, DVM, DACVIM (SAIM)

Veterinary Internal Medicine Specialist
info@SonoPath.com