

PATIENT

Angus Camp

SPECIES

Canine

BREED

Cairn Terrier

SEX

Neutered Male

AGE

9 Years 2 Months

WEIGHT

6.8 kg

INTERPRETED BY

Beth Johnson, DVM
DACVIM

IMAGING PERFORMED BY

Loetitia Saint-Jacques,
LVT

HOSPITAL NAME

Incline VH

REFERRING VET

Ivan Grechanichenko,
DVM

INVOICE

35958

DATE

2/23/26

PRESENTING CLINICAL SIGNS

The pet came in on 1/8/26 for bloodwork to be done for a dental. The owner was called the following Monday with the results by DR. Ivan. Dr. Ivan stated to the O that he reviewed Angus's blood work and noted changes in values. Suspect that altered values may be due to recent food intake prior to the blood draw. Recommended repeating blood work to confirm normal values. Pt should fast for 8 hours. Then on 1/14/26 the pet came in for a redraw of the blood. Angus's bloodwork showed elevated ALP again with a similar number (507 U/L). Significantly increased ALP can indicate any of the problems with bile evacuation (anything from simple bile stasis (most common) to something like liver mass affecting bile ducts). Primary liver disease/infection also cannot be ruled out. The best option now is to schedule Angus for an abdominal ultrasound to investigate what is going on with his liver and gallbladder and assess neighboring organs as well. Working diagnosis

Issues with liver and gallbladder

Abnormal PE/Chem/CBC/UA Results: ALKP 507 23 - 212 U/L HIGH Cholesterol 330 110 - 320 mg/dL H Amylase 512 500 - 1,500 U/L Lipase 2,127 200 - 1,800 U/L

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

Urinary bladder is adequately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

Prostate is normal in size, echotexture and echogenicity for a neutered male.

Left kidney is normal in size (4.5 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

Right kidney is normal in size (4.6 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

Adrenal Glands

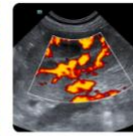
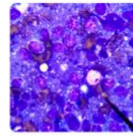
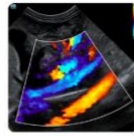
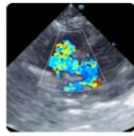
Left adrenal gland is normal in size (0.5 cm at cranial pole and 0.5 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Right adrenal gland is normal in size (0.4 cm at cranial pole and 0.4 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Spleen

Spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). No focal nodules or masses are observed. Splenic vasculature appears normal.

Liver



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Liver is subjectively enlarged with mildly irregular margins. Parenchyma is moderately heterogenous characterized by multiple poorly defined hypoechoic nodules within otherwise hyperechoic liver parenchyma. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.

Gastrointestinal

The visible stomach wall is normal in thickness and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

The visible small intestines are normal in wall thickness and layering. Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

Pancreas

The observed pancreas appears appropriately isoechoic to surrounding omental fat. The capsule is mildly irregular in shape. Parenchyma is mildly heterogenous and coarse. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

Free Abdomen

There is no visible free peritoneal effusion noted in these images.

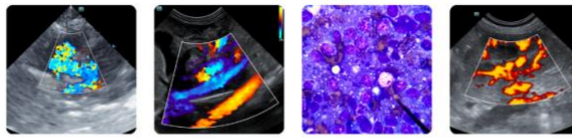
There is no apparent pathologic lymphadenopathy noted in these images.

ULTRASONOGRAPHIC FINDINGS

- Moderately heterogeneous liver- These changes are most consistent with benign processes such as nodular hyperplasia, steroid (vacuolar) hepatopathy, extramedullary hematopoiesis or possibly chronic inflammatory disease and less commonly infiltrative round cell or metastatic neoplasia.
- Age related pancreatic remodeling- Mild irregularities are consistent with benign age-related change. Low-grade smoldering chronic pancreatitis cannot be ruled out and should be suspected in the face of appropriate clinical signs.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Differentials for a primary cholestatic liver enzyme pattern (increased ALP) are vast and non-specific. Differentials include, but are not limited to, benign nodular hyperplasia which occurs in 70% of older dogs and often does not result in an abnormal ultrasound, reactive or idiopathic/vacuolar hepatopathy, cholestasis and/or hyperadrenocorticism as well as many chronic non-hepatobiliary diseases such as chronic infections/inflammation from dental disease, IBD, neoplasia, hyperlipidemia, hypothyroidism, chronic pancreatitis, chronic stress, etc.



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Adrenocortical testing such as a low dose dexamethasone suppression test could be considered if clinical signs of hyperadrenocorticism are present.

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Ursodiol could be considered if gallbladder sludge is noted as a finding.

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A fine needle aspirate of the liver could be considered if patient's coagulation status is appropriate.

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Otherwise, recommendations include addressing any other concurrent disease and monitoring. If values are progressive, recheck imaging is recommended.

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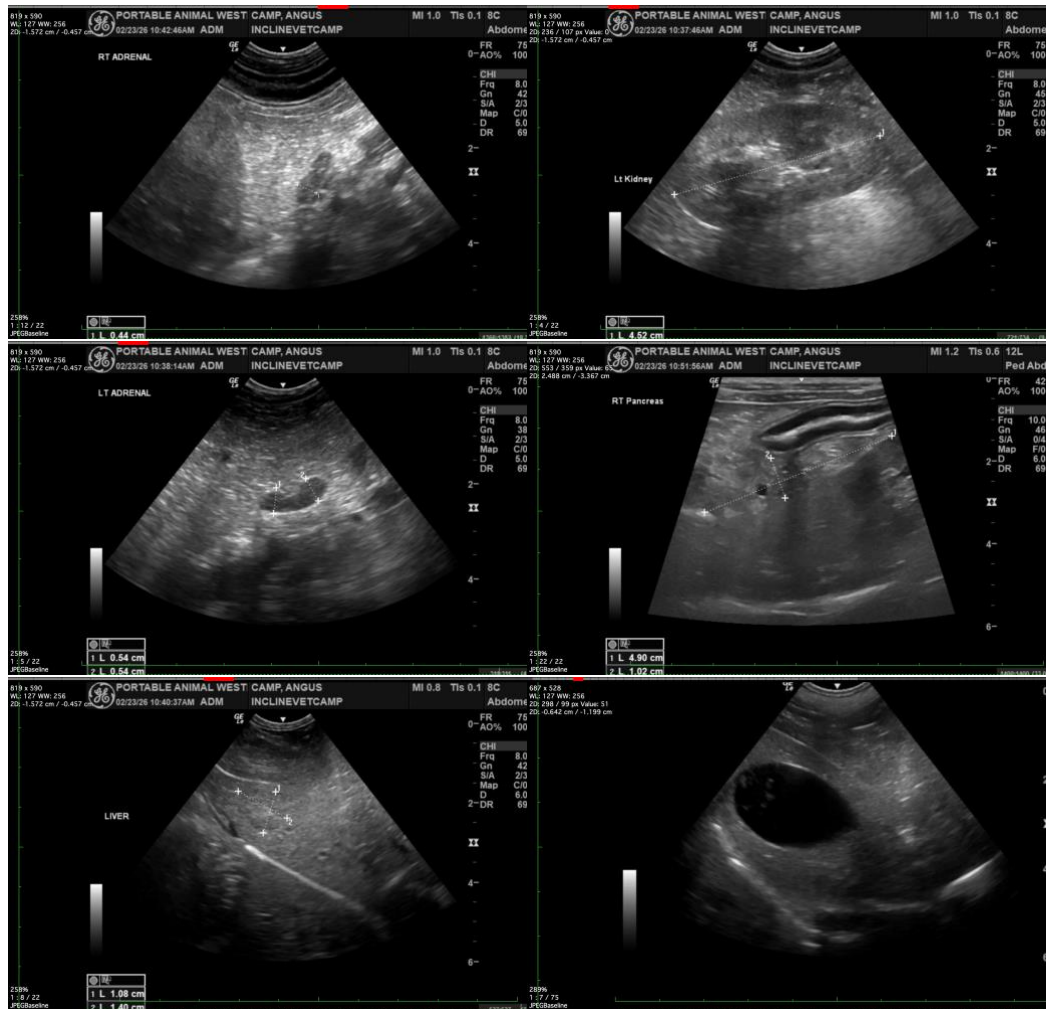
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Imaging
performed by



Portable Animal West Camp Sonography, Inc.
pawsonography@gmail.com
530-786-8340



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SonoPath.com info@sonopath.com 1.800.838.4268

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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.

Beth Johnson, DVM DACVIM

info@sonopath.com