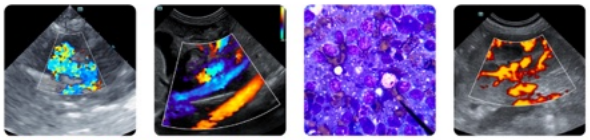


PATIENT

Jazzi Stevens

SPECIES

Canine

BREED

Miniature Australian Collie

SEX

Spayed female

AGE

10 years

WEIGHT

42.4 lbs

INTERPRETED BY

Alicia Angosto Guerrero, DMV, PgDip, MSc.

IMAGING PERFORMED BY

Dr. Brooke Cory

HOSPITAL NAME

Cold Lake VC

REFERRING VET

Dr. Cory

INVOICE

75595

DATE

5/15/26

PRESENTING CLINICAL SIGNS

History: Patients ALT, ALKP, and Cholesterol continue to increase despite being on Pro-Liv LG Dog tabs 1 tab PO q24h. Pet is also on thyro tabs 0.2mg PO q12h.
ALT 377 U/L, ALKP 484 U/L, Cholesterol 9.63 mmol/L, TT4 49 mmol/L

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is markedly poorly distended, limiting accurate assessment of the bladder wall thickness. The wall appears mildly thickened subjectively, although this may be partially artifactual secondary to underdistension. Mild echogenic urinary sediment composed of small dependent hyperechoic crystalline/mineral echoes is present within the lumen and may also be contributing to mild mural irritation. No uroliths or discrete mass lesions are identified.

The left kidney is normal in shape and size: 6.97×3.99 cm, and the thickness of the cortex is 0.56 cm, in the sagittal plane. The right kidney is normal in shape and size: 7.11×4.12 cm, and the thickness of the cortex is 0.60 cm, in the sagittal plane. Both kidneys: The renal cortices are isoechoic compared to the liver parenchyma. The corticomedullary ratio is normal and corticomedullary definition is preserved. There is no evidence of pyelectasia, nephrolithiasis, or hydronephrosis. Color Doppler demonstrates a normal vascular pattern.

Adrenal Glands

Both adrenal glands show normal shape and echogenicity. Dorsoventral diameters measured in the sagittal plane: The left adrenal gland measures 0.50 cm at the cranial pole and 0.56 cm at the caudal pole. The right adrenal gland measures 0.70 cm at the cranial pole and 0.70 cm at the caudal pole.

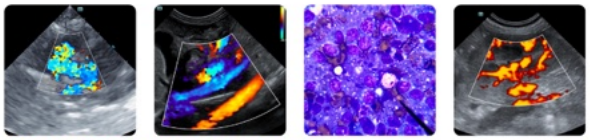
Spleen

Splenic thickness is 2.10 cm. The parenchyma demonstrates normal echogenicity and fine homogeneous echotexture without focal parenchymal abnormalities. The splenic capsule is smooth and regular.

Liver

The liver is subjectively mildly enlarged, with sharp margins and a regular contour. The hepatic parenchyma is diffusely heterogeneous secondary to the presence of multiple, variably sized, rounded nodular lesions distributed throughout the liver parenchyma, most measuring approximately 1-2 cm in diameter, although one lesion is mildly larger. The nodules are relatively well defined and multifocal without evidence of marked invasive behavior, severe architectural distortion, cavitation, or mineralization on the submitted images. No hepatic lymphadenopathy is identified.

The gallbladder lumen is normally distended. The gallbladder wall is thin. A small focal polypoid mural structure is present along the gallbladder wall. Mild non-shadowing biliary sludge is present within the lumen. No evidence of cystic duct or common bile duct dilation is identified.



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Gastrointestinal

The stomach contains a small amount of ingesta. Gastric wall layering is preserved. The pylorus measures 7.1 mm. Duodenum: 3.95 mm. Jejunum: 3.15-3.65 mm with preserved wall layering. No ultrasonographic evidence of gastrointestinal inflammation, ileus, obstructive disease, or foreign material is identified. The colon measures 1.37 mm and contains formed fecal material within the descending colon.

Pancreas

The evaluated pancreatic regions do not show evidence of overt inflammation or neoplastic disease.

Free Abdomen

No sonographic evidence of abdominal effusion, peritonitis, or lymphadenomegaly is identified. The iliac trifurcation is normal.

PRIMARY FINDINGS

- Subjective mild hepatomegaly with multifocal hepatic nodular changes
- Small gallbladder polypoid mural lesion with mild biliary sludge
- Mild right adrenal enlargement
- Mild urinary sediment with limited assessment of the urinary bladder wall due to underdistension

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The dominant ultrasonographic abnormality is the presence of multifocal hepatic nodular disease within a mildly enlarged liver. In an older dog, the overall sonographic appearance is most supportive of benign hepatocellular nodular hyperplasia and/or vacuolar hepatopathy-related regenerative nodular change, particularly given the multifocal distribution, relatively well-defined appearance, lack of convincing invasive features, and concurrent cholestatic/hepatocellular enzyme elevations. The clinical history of hypercholesterolemia and treated endocrinopathy further supports the possibility of metabolic/endocrine-associated hepatopathy.

However, ultrasonography alone cannot reliably differentiate benign nodular hyperplasia from multifocal primary or metastatic hepatic neoplasia, particularly when lesions become numerous or heterogeneous. Although the current appearance is not strongly aggressive sonographically, infiltrative neoplasia cannot be completely excluded based on imaging alone.

The mild right adrenal enlargement is nonspecific and relatively subtle. Given the measured thickness of approximately 7 mm, mild adrenal hyperplasia or functional endocrine stimulation remains possible, although this finding alone is insufficient to diagnose hyperadrenocorticism. Correlation with clinical signs and endocrine testing is recommended if clinically indicated.

The small gallbladder polypoid lesion may represent focal mucosal hyperplasia/cholesterol polyp or

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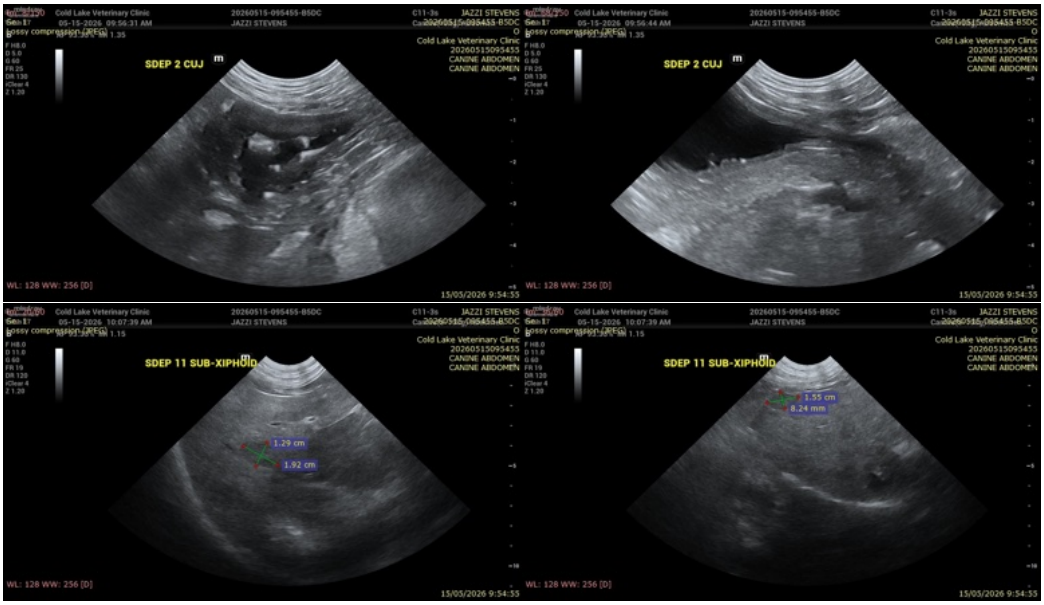
other benign mural change. There is currently no ultrasonographic evidence of biliary obstruction or advanced gallbladder disease. Mild biliary sludge is common and nonspecific.

Mild urinary sediment is present, and mild cystitis cannot be completely excluded. However, assessment of the urinary bladder wall is significantly limited by the marked underdistension of the bladder at the time of examination, which may artifactually exaggerate mural thickness. Correlation with urinalysis, including sediment examination, is recommended given the presence of echogenic urinary sediment/crystalline material.

Recommendations

- Correlation with serial liver enzyme trends, cholesterol levels, thyroid monitoring, and overall endocrine status is recommended.
- If clinically indicated, consideration could be given to endocrine testing for hyperadrenocorticism, particularly if compatible clinical signs are present.
- Ultrasound-guided hepatic cytology or hepatic biopsy may be considered if definitive differentiation between benign nodular hyperplasia and neoplasia.
- Periodic monitoring of the liver is recommended to assess for progression.

Final diagnostic and therapeutic decisions should be made by the attending veterinarian, who can best integrate these findings with the patient's clinical status.



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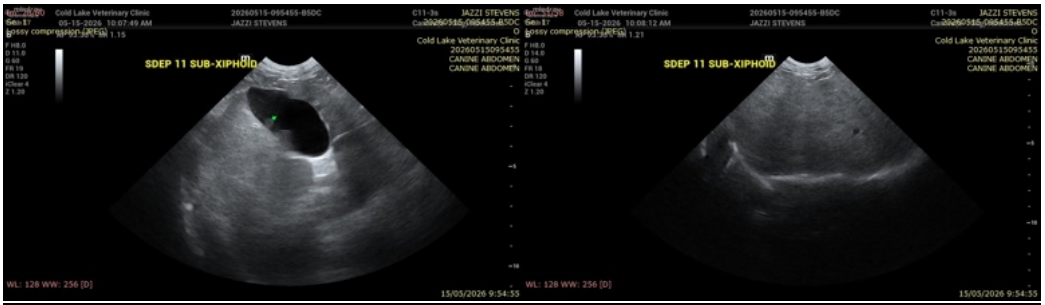

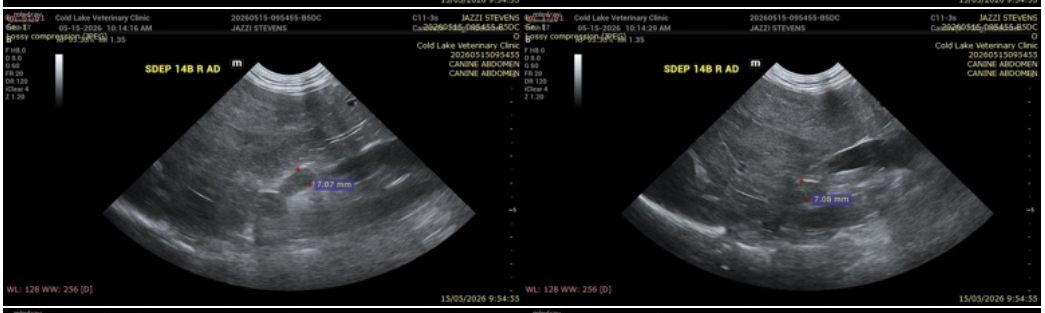

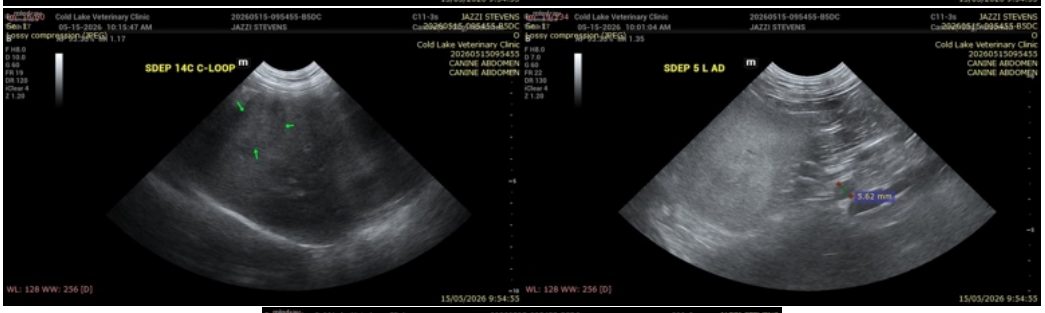

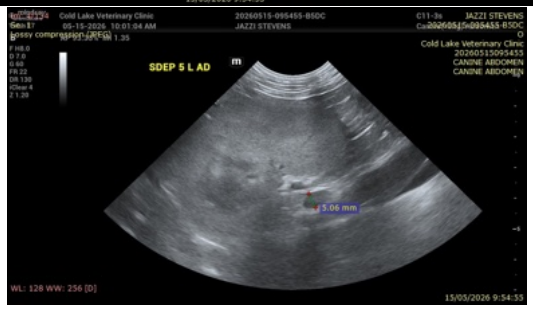

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Alicia Angosto Guerrero, DMV, PgDip, MSc.

info@SonoPath.com