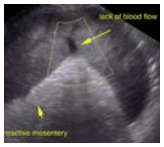
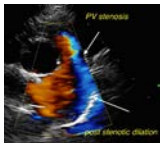
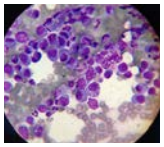
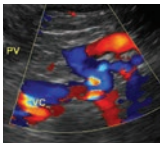
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT
Banjo Ladwig

SPECIES
Canine

BREED
Lab X

SEX
Spayed Female

AGE
12 Years

WEIGHT
65 Pounds

INTERPRETED BY
Karen Ebersole, DVM, DABVP (Canine and Feline)

IMAGING PERFORMED BY
Dr. Desen Ertunc

HOSPITAL NAME
Humboldt VMG

REFERRING VET
Dr. Desen Ertunc

INVOICE
44817

DATE
8/18/23

PRESENTING CLINICAL SIGNS

Several week history of refusing kibble, eating homemade diet well. No C/S/V/D/PU/PD. Chronic PL weakness. 9 pound weight loss since last year.

Abnormal PE/Chem/CBC/UA Results: PE- Decreased BCS 4/9. CBC: Retic= 116 (10-110), otherwise WNL. Chem: Cl= 106 (108-119), AG= 29 (11-26), Alb= 4 (2.7-3.9), ALT= 196 (18-121), ALP= 1417 (5-160), GGT= 132 (0-13), Chol= 415 (131-345), all other values WNL spec cPL= 88 (0-200) T4: 0.9 (1-4) U/A: U.S.G.= 1.026, pH= 7.5 , Protein= 1+, inactive sediment HW/L/E/A all negative Fecal- no ova/parasites, Fecal Ag tests all negative

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The **urinary bladder** was normal in size and shape. The serosal and mucosal surfaces were smooth and curvilinear. The bladder wall was normal in thickness for the volume of urine present. The urine was anechoic with no sediment or uroliths. The ureters were not visible, which is normal. The bladder trigone were normal. The pelvic urethra was visualized to a depth of 2.0 cm and was normal in thickness and tone.

The **iliac trifurcation** was visualized. There was normal vascular perfusion with no evidence of thrombus formation. The medial iliac lymph nodes were visualized and found to be normal in size, shape and echogenicity.

Both **kidneys** were indistinctly visualized. The right kidney measured 5.8 cm and appeared normal in size and shape. The left kidney appeared normal in shape and visible internal architecture. There was no overt pathology in the region of the left or right kidney.

Adrenal Glands

The **adrenal glands** were not distinctly visualized.

Spleen

The **spleen** was volume contracted and displaced dorsally by the hepatic pathology. The visible spleen was normal in shape with no capsule deviation, with normal finely textured parenchyma.

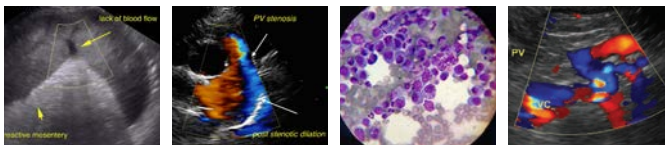
Liver

The **liver** was increased in size with a nodular irregular capsule contour. There was a large, complex, mixed echogenicity mass with hyper- and hypoechoic regions in the left liver. This mass measured approximately 8.0 cm in diameter and occupied the majority of the left liver. The right liver had variably sized diffuse nodules, which may or may not be related to the large mass in the left liver.

The **gallbladder** was normal in size with moderate congealed bile. The gallbladder wall was normal in thickness. This is a non-mucocele presentation.

Gastrointestinal

The **stomach** was largely empty with normal size, shape, and position. The stomach wall was normal in thickness and maintained appropriate layering. The **small intestine** displayed normal curvilinear



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patterns throughout, with normal wall thickness and layering. Normal peristalsis was present. The visible **colon** wall was normal in thickness and layering. There were no visible masses or focal lesions.

Pancreas

The left limb, body and right limb of the **pancreas** were visualized and found to be normal in size and shape. The pancreatic capsule was smooth, without deviation or expansion. The parenchyma was isoechoic to the surrounding mesentery. The pancreatic duct was normal in size and appearance. There was no evidence of discrete masses or inflammation.

Free Abdomen

No peritoneal effusion or lymphadenopathy was noted on examination of the peritoneal cavity.

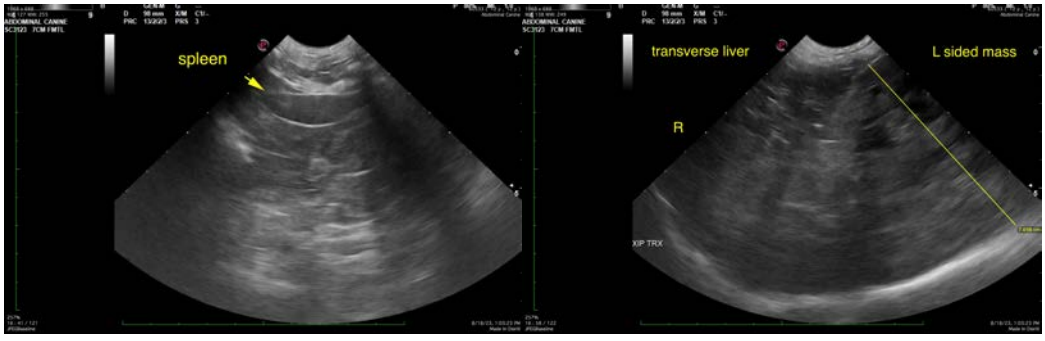
ULTRASONOGRAPHIC FINDINGS

- Large left-sided complex liver mass
- Moderate gallbladder sludge, non-mucocele
- Nodular changes in the general liver parenchyma – DDX benign nodular regeneration versus metastasis or extension of left liver lobe mass.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

This liver mass appears primarily in the left liver but may also extend into the other liver lobes. Hepatocellular carcinoma is the most common primary hepatic neoplasia in dogs. Hepatocellular adenoma (ie hepatoma) or large hepatic granuloma could be possible as well. There are several other types of primary liver neoplasia: bile duct, neuroendocrine or mesenchymal (HSA, fibrosarcoma, etc), although they occur much less commonly. Surgery is the treatment of choice when the mass is resectable.

FNA may be able to identify the type of tumor. Some require a core biopsy for diagnosis. If the owners wish to pursue surgical options, three view screening chest rads and a CT would be needed for surgical planning. Some of these single liver lobe masses can be removed via liver lobectomy if critical structures can be avoided (portal hilus, CVC, hepatic and portal vasculature and checking if the diaphragm is adhered to the mass).



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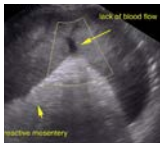
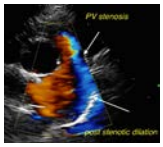
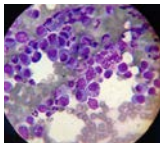
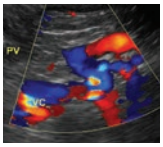

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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Karen Ebersole, DVM, DABVP (Canine and Feline practice)
info@SonoPath.com