PATIENT

Cookie Arroyo

SPECIES

Feline

BREED

DSH

SEX

Spayed Female

AGE

8.5 Years

WEIGHT

9.15 lbs

INTERPRETED BY

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

IMAGING PERFORMED BY

Rebecca Hamilton

HOSPITAL NAME

Vetco Total Care Hackensack

REFERRING VET

Dr. Behin

INVOICE

71623

DATE

11/6/25

PRESENTING CLINICAL SIGNS

Suspected chronic cholangiohepatitis vs. neoplasia vs. hepatitis vs. other (PC: anorexia, weight loss, icterus, lethargy Meds: 10/23 receive Convenia 0.5 ml SQ, Cerenia 0.5 ml sq, mirtazapine 1.5 in SID

Abnormal PE/Chem/CBC/UA Results: ^ALP (10/23 783, 11/6 1470, ^GGT 10/23 22, 11/6 31, ^retic 10/23 132.4 11/6 61, ^neut 10/23 11.4 11/6 18.04, ^Mono 10/23 0.98 11/6 0.89, ^ALT 10/23 489, 11/6 449, ^chol 11:6 387, Anemia, hypothermia (147) ^ Bile acids

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 left kidney has a normal shape and size (3.66 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 (3.9 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 normal in size measuring 0.44 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.

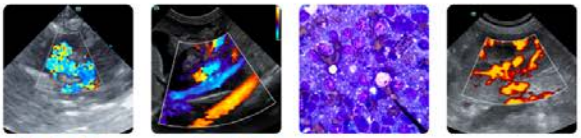
The right adrenal gland is normal in size measuring 0.51 cm at the caudal pole. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

Spleen

The spleen is normal in size but irregular in shape, measuring 0.66 cm in width at the level of the hilus. The blood flow through the hilus and splenic parenchyma appears normal. In the caudal half of the spleen there is a hypoechoic nodule deforming the splenic capsule measuring 0.83 cm x 0.66 cm. In the cranial pole there is a hypoechoic nodule within the parenchyma measuring 0.78 cm x 0.98cm.

Liver

The liver is large, irregular, and heterogeneous with too numerous to count diffuse nodules. The visible portions of the vasculature and biliary tract appear normal. The liver is diffusely nodular with discrete hyper- and hypoechoic nodules that deform the hepatic architecture. Many of these nodules are mixed in echogenicity, varying in size from 2.5 cm x 0.50 cm. No normal hepatic parenchyma is visualized. There are some focal areas of mineralization noted and some cystic/cavitated lesions.



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The gallbladder is difficult to clearly visualize within the abnormal hepatic parenchyma. The suspected gallbladder appears collapsed and relatively empty with shadowing intraluminal mineralized debris.

Gastrointestinal

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.36cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layers is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

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. The duodenum measured as normal (between 0.13-0.38cm in wall thickness) and the jejunum measured as normal (between 0.15-0.36cm.) 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

There is a small to moderate amount of free abdominal fluid. No lymphadenopathy noted. The omentum is hyperechoic in the cranial abdomen.

ULTRASONOGRAPHIC FINDINGS

- Two hypoechoic nodules in the spleen – Findings are concerning for metastatic nodules, although benign nodules such as hematomas, hemangiomas, lymphoid hyperplasia, other are possible.
- Diffusely nodular, irregular liver – Findings are concerning for metastatic neoplasia. Benign lesions are possible. Consider a fine needle aspirate.
- Suspected collapsed, thickened gallbladder with intraluminal mineralized debris – Findings are most consistent with choleliths.
- Free abdominal fluid.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The liver is large, irregular, and diffusely nodular with variably appearing heterogeneous nodules. Some are mineralized, some are somewhat cystic/cavitated. There is no normal hepatic parenchyma visualized. The gallbladder is very difficult to discern but is suspected to have intraluminal mineralization. Findings are concerning for diffuse metastatic disease. Recommend a fine needle aspirate of the liver to further evaluate.

Additionally, there are two hypoechoic nodules in the spleen. Based on the appearance of the liver, these are concerning for metastatic nodules, but benign lesions are possible. Fine needle aspirates of the splenic nodules could also be considered.

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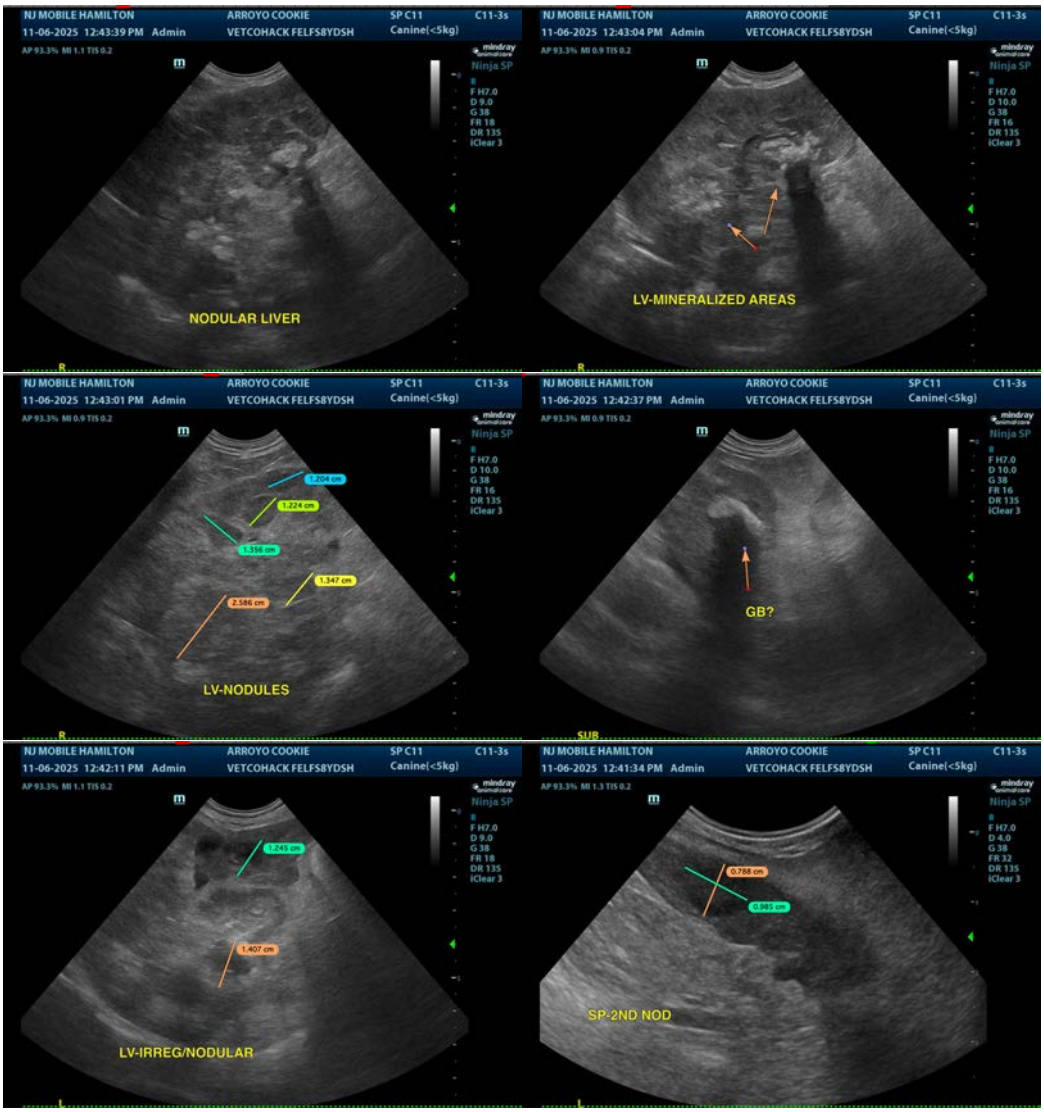
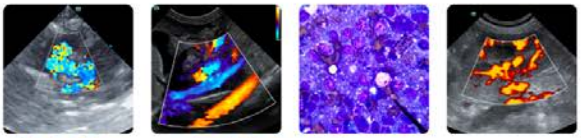
If a cytologic diagnosis is not possible, biopsies of the liver and spleen may be necessary.

Consider non-specific supportive care for the liver. If hepatic encephalopathy is suspected, consider treatment with lactulose, Metoclopramide, etc. Additionally, supportive care with anti-nausea medications +/- antacids and Ursodiol may be beneficial.

Recommend three view thoracic radiographs to evaluate for possible concurrent thoracic disease/involvement (disregard if this has already been done).



New Jersey Mobile
FUELED BY SONOPATH VETERINARY ULTRASOUND



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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