IMAGING PERFORMED BY

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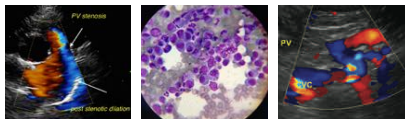

SonoPath
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DATE
2/8/22

PATIENT
Malibu Hopp

SPECIES
Canine

BREED
Beagle Mix

SEX
Spayed Female

AGE
3/21/09

WEIGHT
69 lbs

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

HOSPITAL NAME
Bel Air VH

REFERRING VET
Dr. Schmidt

INVOICE
95882

PRESENTING CLINICAL SIGNS

History: October 15th, 2021: Grade 3/6 heart murmur-new development, abdomen distended. Growth on right elbow 5 x 3 x 2 cm. January 18th, 2022: Growth on right elbow 5 x 5 x 2 cm.
Current Medications: Pimobendan 10mg: 1 tablet once a day in the AM and 1/2 tablet by mouth once a day in the PM. Improved on this medication.
Lab Results: Attached separately.
Radiographs: Radiographs 10/2021: chest- cardiomegaly, abdomen- hepatomegaly. Attached separately.
Date of Previous IntraPet Ultrasound: No previous IntraPet scans.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Stephanie Pearce RDCS, RVT.

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 (7.19 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of 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 (8.05 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of 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 0.78 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 0.75 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 subjectively normal in size, echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

Liver

The liver is subjectively large in size, and echogenicity with smooth peripheral margins. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. There are numerous, ill-defined, hypoechoic nodules diffusely throughout the hepatic parenchyma and measured 1.0 cm, 1.2 cm, 1.4 cm and 1.47 cm. The gallbladder lumen is moderately distended. The wall of the gallbladder is not thickened and has a smooth mucosal surface. There is a moderate amount of non-organized echogenic debris. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.7cm 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 and the jejunum measured as normal (0.32 cm). Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. 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 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

Evaluation of the peritoneal cavity did not reveal any evidence of effusion, or subjective lymphadenomegaly. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of normal uniform echogenicity.

Other

There is a hypoechoic structure in the cranial abdomen measuring 1.81 cm. This is most consistent with a free abdominal cyst or a cystic lymph node. This lesion lies near the great vessels slightly caudal medial to the right adrenal gland.

ULTRASONOGRAPHIC FINDINGS

PRIMARY FINDINGS:

- Large, heterogenous/diffusely nodular liver. The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy. These findings could represent a benign or neoplastic process. While these findings could represent a benign or neoplastic process the appearance trends towards a benign process.

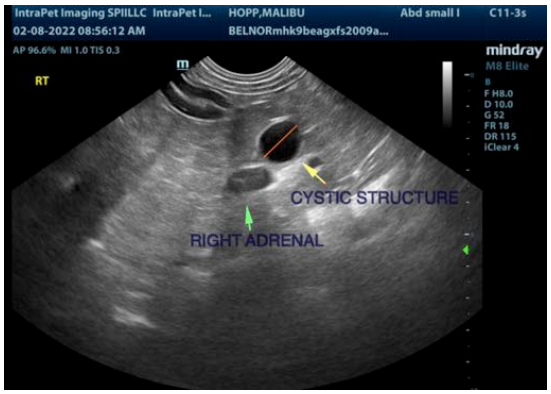
- Moderate gallbladder debris. The significance of the aggregated gallbladder debris is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting.

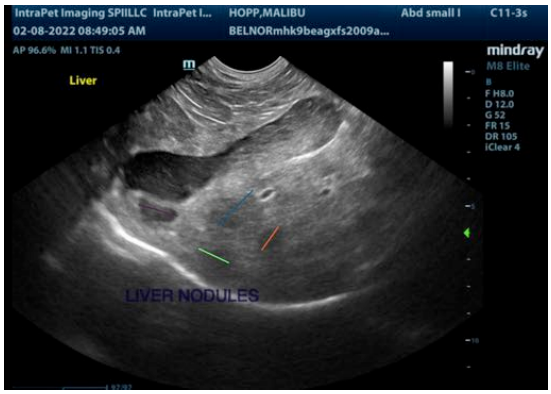
- Cystic structure in the cranial medial aspect of the abdomen. This is most consistent with a cyst. I recommend to continue monitoring.

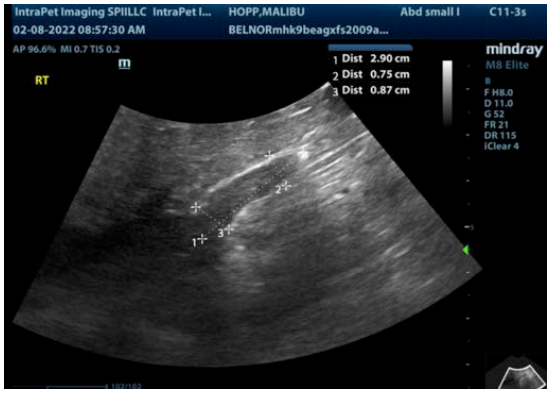
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

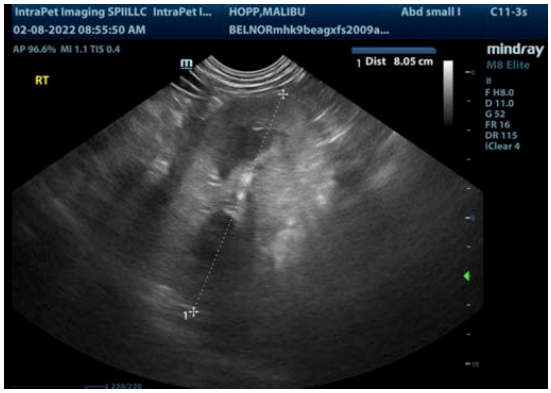
The liver appears somewhat heterogenous and diffusely nodular. I suspect these lesions represent benign lesions such as regenerative nodules, etc. but in this situation metastatic disease cannot be excluded as a possibility. Consider a FNA of the liver to differentiate these processes. Aside from these lesions observed in

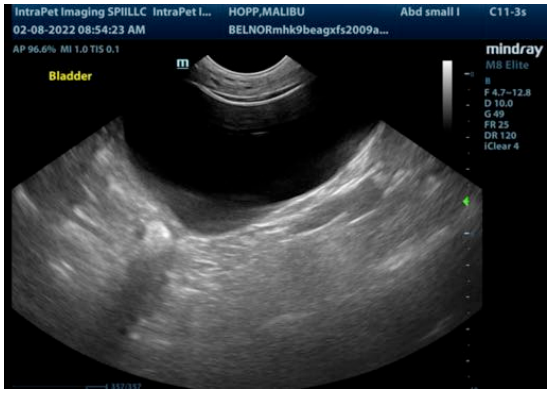
the liver there is no other evidence of obvious metastatic disease. The gallbladder sludge present is likely an incidental findings and the significance of the small cystic structure in the abdomen is currently unknown. I cannot associate it with any other abdominal structures so continued monitoring is warranted.

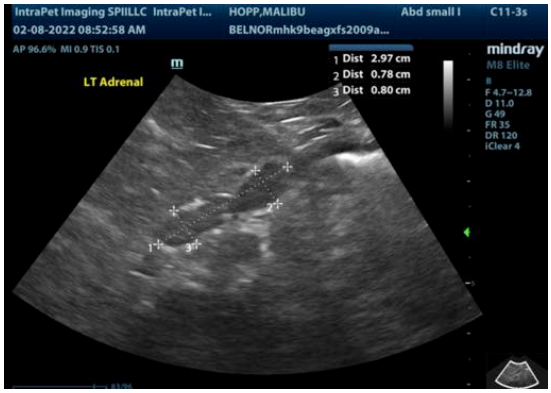


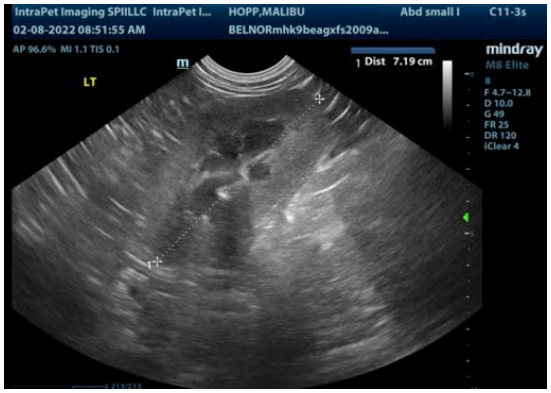


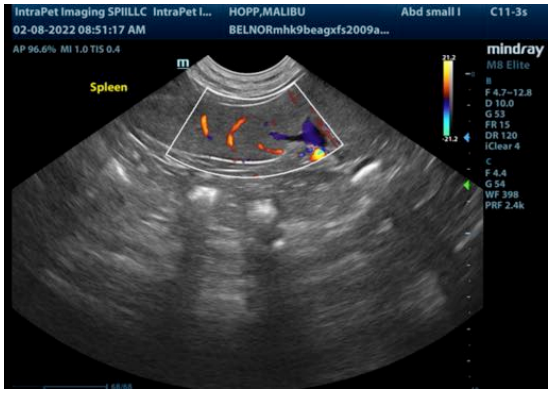












The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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