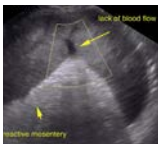
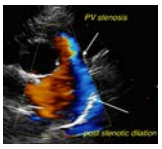
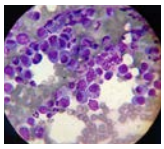
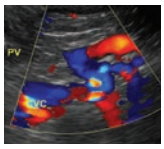
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

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

PATIENT
Bella Gray

SPECIES
Canine

BREED
Chihuahua X

SEX
Spayed Female

AGE
14 Years

WEIGHT
5.6 kg

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

IMAGING PERFORMED BY
Erin Wicks

HOSPITAL NAME
Shores VEC

REFERRING VET
Dr. Lupole

INVOICE
26149

DATE
10/7/21

PRESENTING CLINICAL SIGNS

Presented at our hospital for not wanting to eat, lethargic, and vomiting. Past 4 days patient has barely been nibbling at food and hasn't eaten much for past 2 days. Patient isn't acting herself and is laying around more often. Patient started vomiting yesterday. Owner says she seems to be having issues walking up inclines. Previous Health Concerns: recent case of kennel cough; had heart worm issue in past
Abnormal PE/Chem/CBC/UA Results: Abdominal: cranial organomegaly, tense Radiographs: loss of serosal detail mid abdomen, suspect mid abdominal mass, hepatomegaly; unremarkable thorax Chemistry: Calcium 8.9 L, ALT 171 H, ALP >993 H, GGT 25 H, Amylase 1510 H, Lipase 380 H CBC: WBC 27.03 H, PMN 24.02 H, stress leukogram, HCT 31.5 % EPOC: HCT 32%, pH 7.315 L cPL: abnormal Flex 4: negative x 4

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 (4.26 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 (4.36 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 0.58 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.

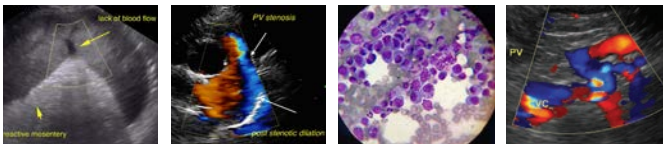
The right adrenal gland is normal in size measuring 0.50 cm at the caudal pole. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

Spleen

The spleen is large in size. The spleen echotexture is heterogenous and mottled, the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. There is a large mixed echogenic, irregular mass effect measuring approximately 6.73 cm x 5.6 cm that appears to be touching the caudal portion of the spleen. A direct attachment is suspected, but not demonstrated by color flow and not confirmed. Additionally, there is another 1.22 cm hyperechoic nodule visualized.

Liver

The liver is large in size, and normal in 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 too numerous to count hyperechoic, irregular mass effects within the hepatic parenchyma, which are expansile and protruding from the splenic



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

PATIENT

Bella Gray

SPECIES

Canine

BREED

Chihuahua X

SEX

Spayed Female

AGE

14 Years

WEIGHT

5.6 kg

INTERPRETED BY

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

IMAGING PERFORMED BY

Erin Wicks

HOSPITAL NAME

Shores VEC

REFERRING VET

Dr. Lupole

INVOICE

26149

DATE

10/7/21

margins in some areas. On the right side of the liver, there is a mass effect that coalesces the large abdominal mass effect, measuring 9.5 cm x 7.1 cm. This has a hyperechoic cystic area within it. It is difficult to determine if this is associated with the mass described with the spleen or is a separate entity.

The gall bladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. There is a mild 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. Duodenum wall measured 0.3 cm. Jejunum wall measured 0.26 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 prominent and mottled compared to the surrounding isoechoic 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.

PRIMARY FINDINGS

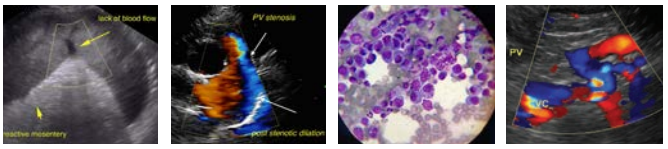
- Large, irregular, heterogeneous liver with numerous mass effects, and a possible large mass effect extending into the caudal abdomen – The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy. There is a high concern for a metastatic neoplastic process.

- Mottled spleen with possible large, mixed echogenic mass effect from the tail – This mass effect could be arising from the spleen or touching it.

SECONDARY FINDINGS

- Prominent, mottled pancreas – The pancreatic changes are most consistent with mild pancreatitis or a recent episode of pancreatic inflammation.

SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
SonoPath.com
1-800-838-4268 info@sonopath.com



PATIENT

Bella Gray

SPECIES

Canine

BREED

Chihuahua X

SEX

Spayed Female

AGE

14 Years

WEIGHT

5.6 kg

INTERPRETED BY

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

IMAGING PERFORMED BY

Erin Wicks

HOSPITAL NAME

Shores VEC

REFERRING VET

Dr. Lupole

INVOICE

26149

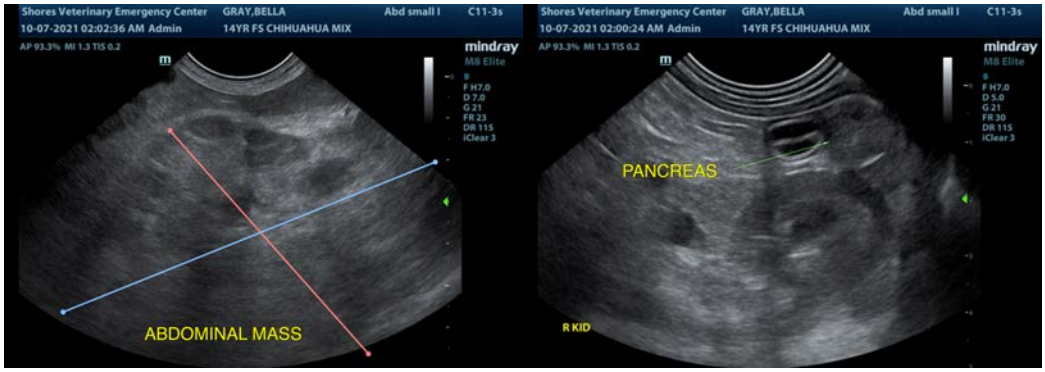
DATE

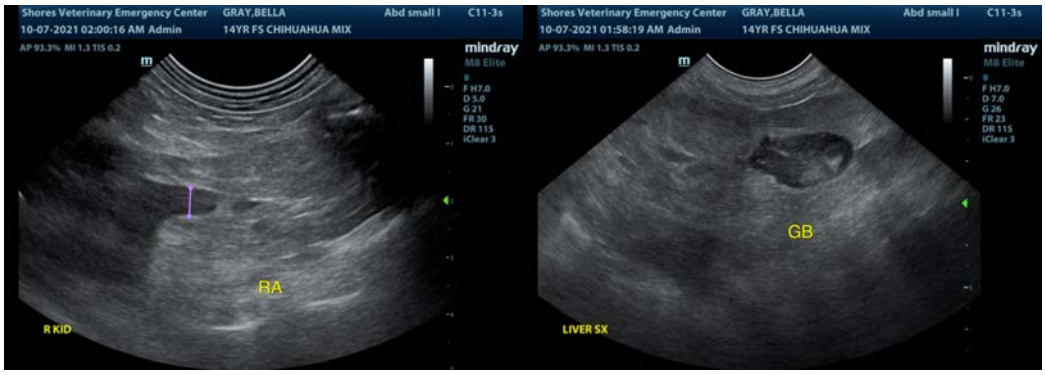
10/7/21

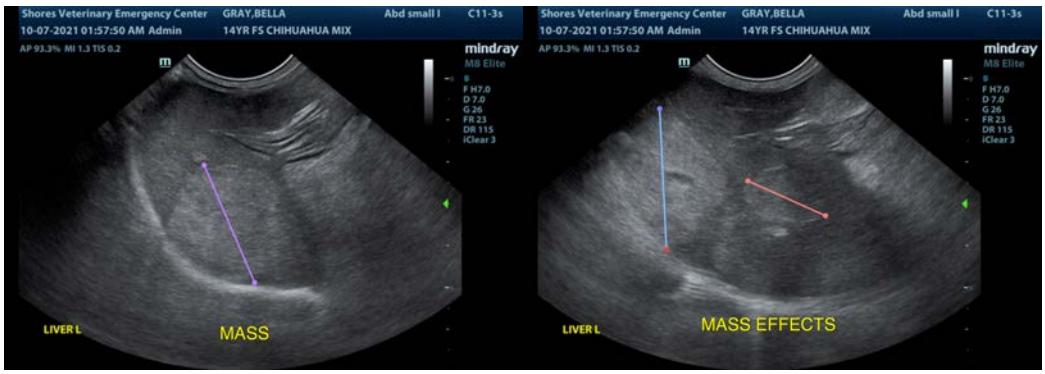
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Both the liver and the spleen are very irregular and mottled. There are several large intraparenchymal hyperechoic mass effects within the liver. In the mid abdomen, there is a large, irregular mottled mass, the caudal portion of which touches the tail of the spleen and could be arising from this area. Color flow would be necessary to determine if there is an actual attachment here.

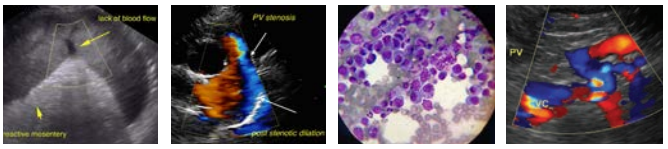
Additionally, there is similar tissue that appears to arise from the caudal portion of the liver and extends caudally into the abdomen. It is not clear if this is a very large liver mass extending to the level of the spleen, or a very large splenic mass extending cranially, or there is the possibility of two separate masses. Recommend fine needle aspirate of the large mass and one of the intraparenchymal hepatic masses. Recommend 3-view thoracic radiographs. If surgical intervention is desired, ideally advanced imaging would be indicated (CT scan).







SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



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

PATIENT

Bella Gray

SPECIES

Canine

BREED

Chihuahua X

SEX

Spayed Female

AGE

14 Years

WEIGHT

5.6 kg

INTERPRETED BY

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

IMAGING PERFORMED BY

Erin Wicks

HOSPITAL NAME

Shores VEC

REFERRING VET

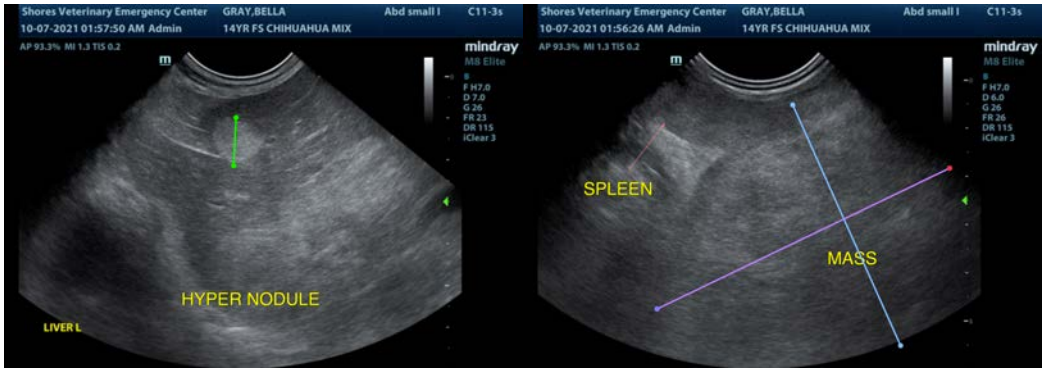
Dr. Lupole

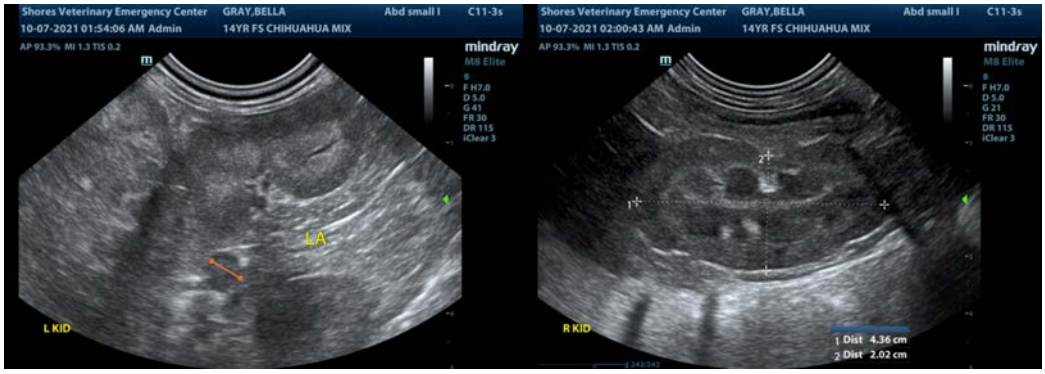
INVOICE

26149

DATE

10/7/21





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.

Kathleen Sennello DVM,MS, Diplomate ACVIM (Small animal Internal Medicine)
kathleen.sennello@sonopath.com