



PATIENT PRESENTING CLINICAL SIGNS

Lulu Fortis
SPECIES Lethargic, elevated liver enzymes. Owner declined ACTH stim test. Has been on Ursodial and Zentoniol. Abnormal PE/Chem/CBC/UA Results: CBC- MCV, Reticulocyte Hemoglobin both M1 decreased. RDW, Platelets, Plateletcrit all elevated. Comments : decreased iron availability. Chemistry - Urea 9.8(2.5-9.6)Potassium 6.8(3.5-5.8) Chloride 107 (109-122) ALT 368(10-125) ALP greater than 2000(23-212) Lipase 2470(200-1800) GGT 31(0-11)
Canine

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

BREED

Boston Terrier X

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.

SEX

Spayed Female

The left kidney has a normal shape and size (4.34 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. In some views of the left kidney there is soft tissue echogenicity visualized in the region of the left renal artery. This could represent an artifact, an early thrombus/vascular invasion, etc.

AGE

12 Years

The right kidney has a normal shape and size (4.68 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.

WEIGHT

25 Pounds

Adrenal Glands

The left adrenal gland is normal in size measuring 0.74 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 0.55 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.

INTERPRETED BY

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

IMAGING PERFORMED BY

Crystal Hill

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. There is a hyperechoic in the periphery of the spleen measuring 0.35 cm x 0.71 cm, most consistent with a benign myelolipomas.

HOSPITAL NAME

Dog & Cat Clinic of
Niagara

REFERRING VET

Dr. Haidy

Liver

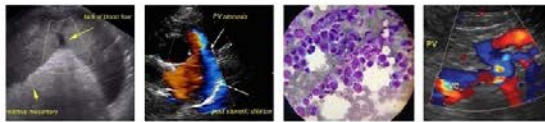
The liver is large and irregular. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. There are numerous ill-defined, subtle hyperechoic nodules throughout the hepatic parenchyma, varying in size form 0.25-1.0 cm. Additionally, there is a larger mixed echogenic, hyperechoic, slightly cystic mass lesion visualized measuring 3.59 cm x 4.21 cm, best visualized in the right side, as well as a small hypoechoic focal lesion near the gallbladder, possibly consistent with a hepatic cyst, measuring 0.62 cm.

INVOICE

42972

DATE

11/23/22



PATIENT

Lulu Fortis

The gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are mild and primarily anechoic. The cystic and common bile ducts are normal/not visible.

SPECIES

Canine

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.

BREED

Boston Terrier X

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 measures 0.36 cm. Jejunum wall measured 0.32 cm. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

SEX

Spayed Female

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.

AGE

12 Years

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.

WEIGHT

25 Pounds

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.

INTERPRETED BY

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

PRIMARY FINDINGS

- Mixed echogenic, mildly cystic mass lesion visualized in the liver – This lesion is somewhat expansile and disrupts the normal margins of the liver. This could be an early primary hepatic lesion, a metastatic lesion, or a benign lesion.
- Heterogeneous 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.
- Soft tissue density visualized in the region of the left renal artery – This could represent an imaging artifact or an early thrombus/mass effect.

IMAGING PERFORMED BY

Crystal Hill

HOSPITAL NAME

Dog & Cat Clinic of
Niagara

REFERRING VET

Dr. Haidy

SECONDARY FINDINGS

- Hyperechoic nodule associated with the spleen – This is most consistent with a benign myelolipoma.

INVOICE

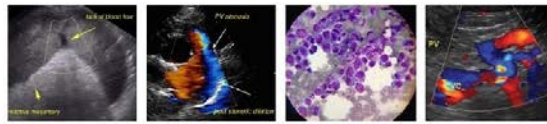
42972

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There is a focal mass effect visualized associated with the liver. This is relatively small in size. Recommend 3-view thoracic radiographs and a contrast CT scan to better evaluate this lesion for possible surgical removal. Additionally, if a CT scan is performed, recommend evaluation of the left renal artery, looking for any pathology (possible mass effect, thrombus, etc.) prior to considering surgery. If the mass lesion is removed, recommend a biopsy of more normal appearing liver as well and evaluation

DATE

11/23/22



PATIENT

Lulu Fortis

of the caudal pole of the left adrenal gland for any evidence of invasion.

SPECIES

Canine

If a contrast CT scan is not pursued, then consider reevaluation of the left renal artery with power doppler in two weeks (sooner if there are concerns).

BREED

Boston Terrier X

SEX

Spayed Female

AGE

12 Years

WEIGHT

25 Pounds

INTERPRETED BY

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

**IMAGING
PERFORMED BY**

Crystal Hill

HOSPITAL NAME

Dog & Cat Clinic of
Niagara

REFERRING VET

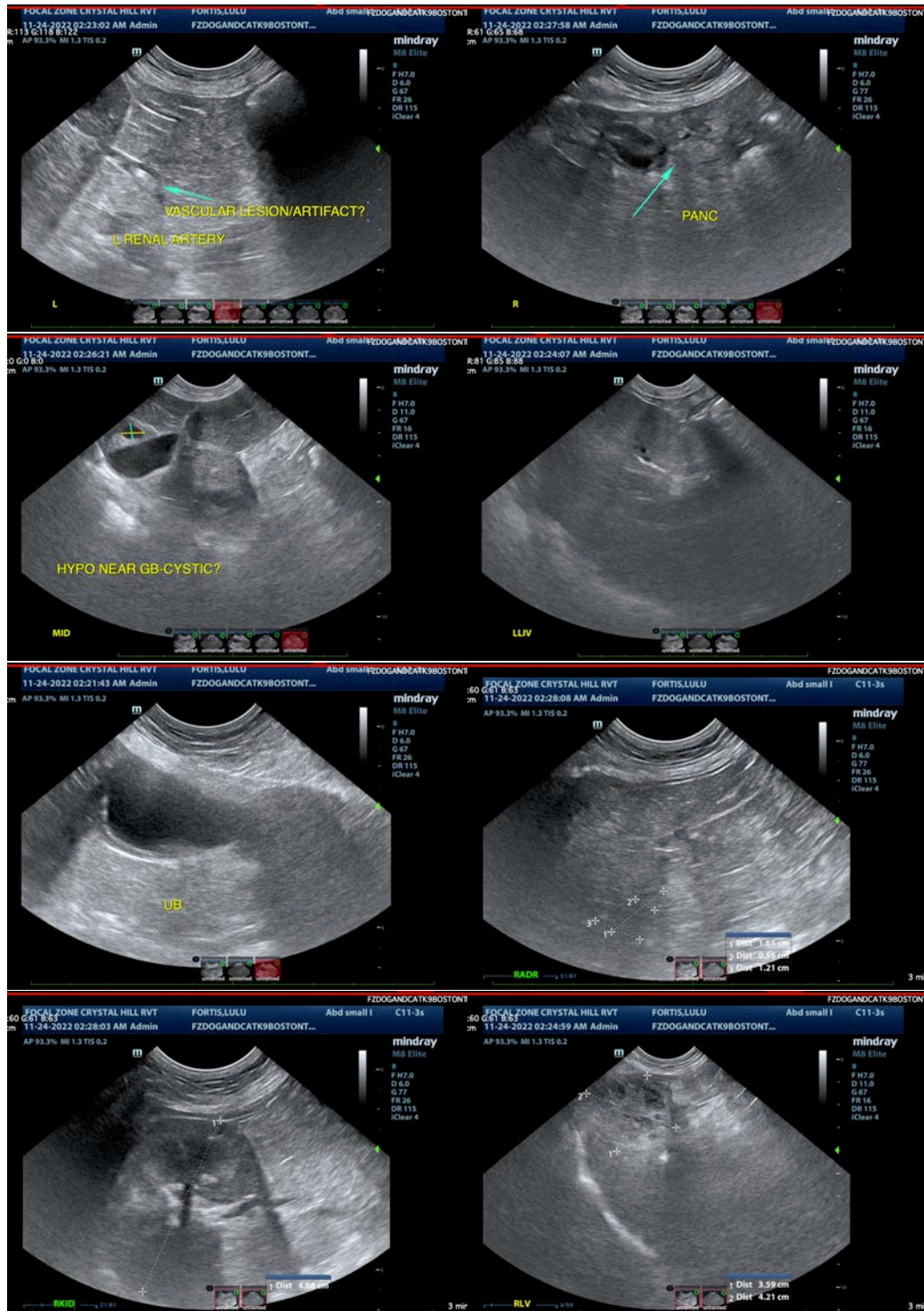
Dr. Haidy

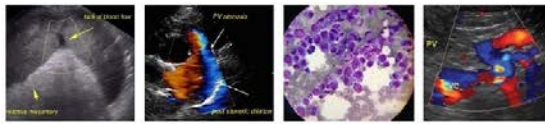
INVOICE

42972

DATE

11/23/22





PATIENT

Lulu Fortis

SPECIES

Canine

BREED

Boston Terrier X

SEX

Spayed Female

AGE

12 Years

WEIGHT

25 Pounds

INTERPRETED BY

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

**IMAGING
PERFORMED BY**

Crystal Hill

HOSPITAL NAME

Dog & Cat Clinic of
Niagara

REFERRING VET

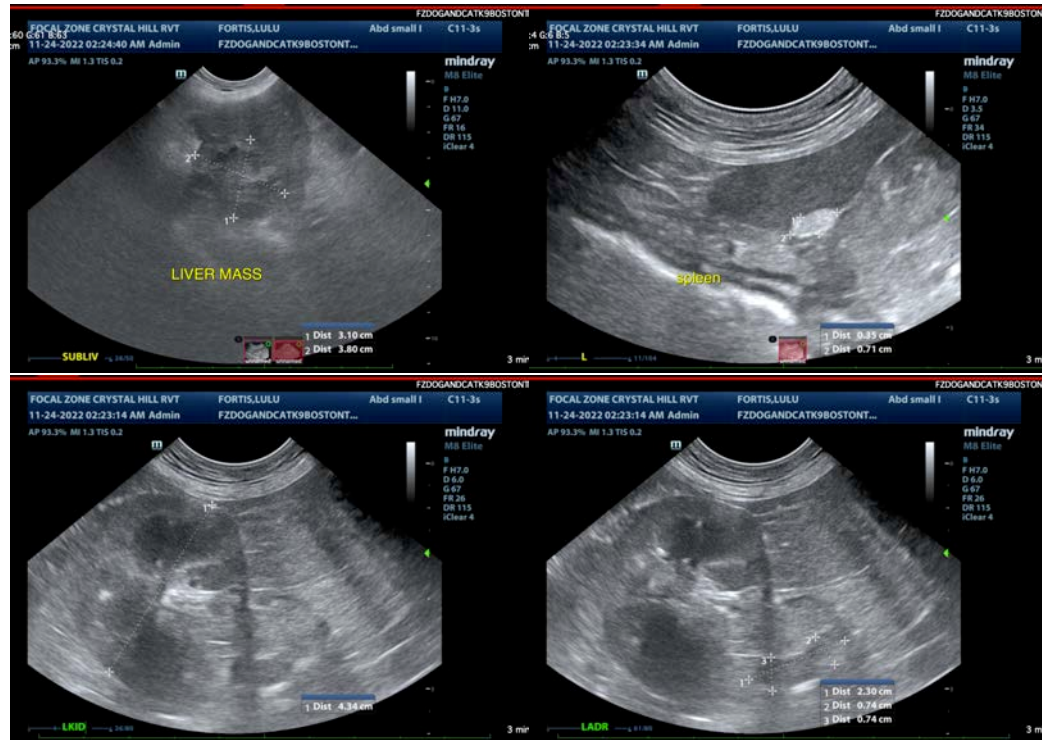
Dr. Haidy

INVOICE

42972

DATE

11/23/22



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)

kathleen.sennello@sonopath.com