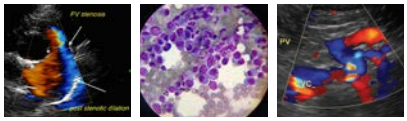
IMAGING PERFORMED BY

IntraPet.com



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DATE

1/18/23

PATIENT

Laya Laster

SPECIES

Canine

BREED

Chihuahua X

SEX

Spayed Female

AGE

7/30/10

WEIGHT

6 Pounds

INTERPRETED BY

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

HOSPITAL NAME

Eldersburg Vet

REFERRING VET

Dr. James

INVOICE

44298

PRESENTING CLINICAL SIGNS

Pt presents for weight loss (5lbs in 4-6 weeks).

Current Medications: None.
Lab Results: IH cbc/chem/t4/sdma/ua= elevated hepatic enzymes ad sdma elevated (23);plt and monocytes elevated; trace hematuria
Radiographs: granular opaque material in stomach extending into pyloris; L lateral view stomach displaced dorsally w/ rounded liver margins and poss distention of gall bladder; splenic margins difficult to discern
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Rachel Brilhart, RDMS.

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 (3.3 cm) with numerous nephroliths. One prominent stone is measured at 0.44 cm. Overall echogenicity is slightly hyperechoic with poor 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, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (3.18 cm) with numerous nephrliths. 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 0.61 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 0.48 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 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 large lobulated mass effects. Some appear within the parenchyma, others are more expansile and bulging out. A very large, hypoechoic and mixed echogenic mass effect appears to be involving the caudal left aspect of the liver, measuring approximately 5.38 cm x 7.23 cm. This mass effect appears to have a slightly narrowed attachment to the distal aspect of the liver. Additionally, there is an intraparenchymal hyperechoic nodule

measuring 1.83 cm in diameter, and a mixed echogenic mass effect in the right side of the liver measuring 2.74 cm x 2.3 cm.

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 moderate amount of hyperechoic, mildly shadowing debris (consistent with possible small stones/sandy debris). The cystic and common bile ducts are normal/not visible.

Gastrointestinal

The stomach is moderately dilated with fluid and irregular shadowing material most consistent with normal ingesta and gas. 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 layering 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 measures 0.32 cm. Jejunum wall measures 0.28 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 hypoechoic as 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.

ULTRASONOGRAPHIC FINDINGS

- Large, heterogeneous, irregular liver with numerous expansile mass effects – Some of these mass effects are somewhat peripheral with narrowed attachments, likely representing primary hepatic masses (adenoma, carcinoma, etc.). Others are intraparenchymal or more associated with the body of the liver and may be interfering more with liver function.

- Moderate hyperechoic debris in the gallbladder – Findings are consistent with possible sandy debris/small stones. No evidence of inflammation or wall thickening is observed.

- Decreased corticomedullary distinction in both kidneys with numerous non-obstructive nephroliths – Mild loss of corticomedullary distinction in both kidneys could be consistent with chronic degenerative disease or interstitial nephrosis.

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

- Large shadowing debris visualized within the stomach – Correlate with feeding history and abdominal radiographs. This could be consistent with ingesta or ingested foreign material. Additionally, the stomach appears somewhat deviated due to the large hepatic mass lesions.

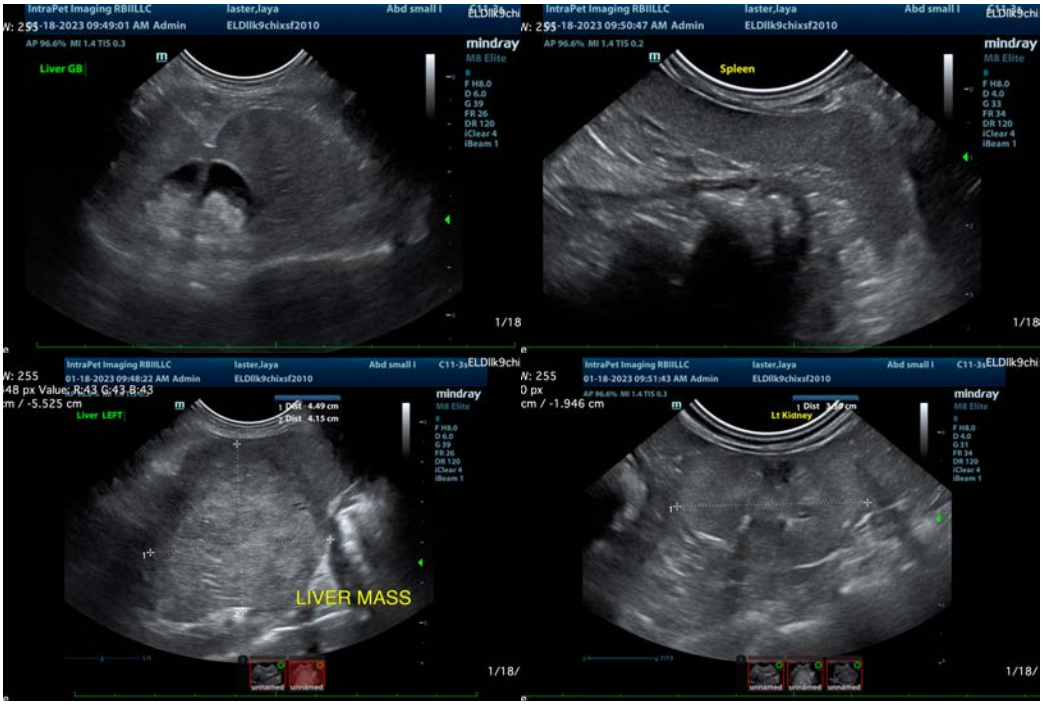
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

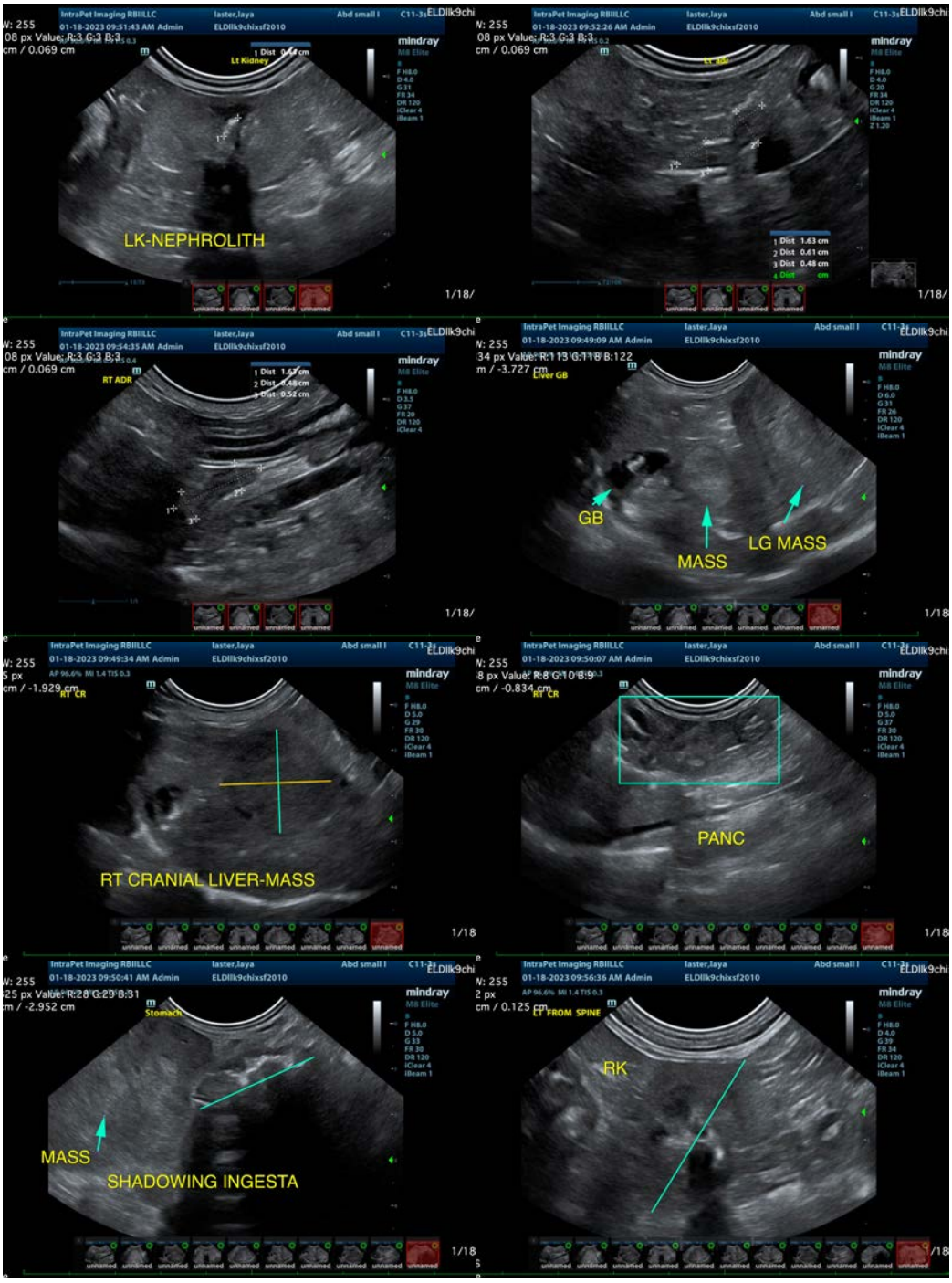
There are numerous large, expansile mass effects associated with the liver. Some of these are more peripheral and could be candidates for removal. Others are more intimately associated with the primary hepatic parenchyma, etc. You could consider fine needle aspirates of several of these mass lesions, or a more aggressive approach, including a contrast CT scan to evaluate for possible surgical removal of some of the larger mass lesions and biopsies of the others, or lastly a conservative approach with monitoring and Ursodiol, although I'm concerned that if there is no evidence of a biliary obstruction secondary to the mass lesions (none is observed) that this could be an indication that the masses are starting to interfere with liver function.

Recommend three view thoracic radiographs to evaluate for possible concurrent thoracic disease/involvement.

Both kidneys have significantly reduced corticomedullary distinction and moderately sized nephroliths. Consider a blood pressure, urinalysis and culture.

The changes in the pancreas are likely most consistent with previous episodes of pancreatic inflammation, although mild chronic inflammation is possible.





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.

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