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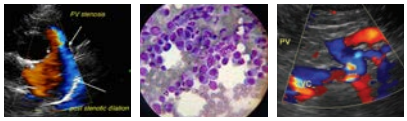

SonoPath

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DATE

1/12/22

PATIENT

Leila Herbert

SPECIES

Canine

BREED

Collie X

SEX

Spayed Female

AGE

11/1/09

WEIGHT

41 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Stephanie Pearce RDCS, RVT

HOSPITAL NAME

Pet Vet of Clarksville

REFERRING VET

Dr. Martof

INVOICE

34167

PRESENTING CLINICAL SIGNS

History: 3weeks ago - was not eating as much. Having diarrhea in the house. Within the last 2 days, appetite back & no diarrhea in house for a week. Single episode about 2 weeks ago that looked like possible seizure
Diet: Purina dry & canned - 1.5 cup SID; adding rice recently with canned food. Was on bland diet for some. (Turned nose up to chicken to rice)
No vomiting. No C/S. 12/23. Discussed elevated ALT 1306, ALP2822, GGT20, AST61 - concern for liver disease - cholangiohepatitis, neoplasia, leptospirosis, other. Recommend abdominal ultrasound as next step to further evaluate She is doing ok. Ravenous the last few days. (more than normal). More affectionate the last two days. No more seizure-like events but she had a weird episode the other night where she was pacing and howling around 5 AM. Walking and responsive. No other issues with sleep/awake cycles. Eating has been better. 1/7 another seizure.

Lab Results: Elevated liver values. Attached separately.
Date of Previous IntraPet Ultrasound: No previous IntraPet scans.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.

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 (5.98 cm). Overall echogenicity is slightly hyperechoic with poor 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 (6.1 cm). Overall echogenicity is slightly hyperechoic with poor 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 large in size measuring 0.88 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 large in size measuring 0.95 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 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 is a very large, mixed echogenic, solid mass effect occupying a large portion of the left side of the liver, measuring >6.95 cm x 9.93 cm.

The gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are primarily anechoic. 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 0.33 cm. Jejunum wall measured 0.31 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.

ULTRASONOGRAPHIC FINDINGS

- Bilateral adrenomegaly – The bilateral adrenomegaly could be consistent with bilateral hyperplasia (e.g., secondary to pituitary-dependent hyperadrenocorticism), bilateral infiltrative neoplasia, inflammatory adrenal disease, other. Correlation with clinical findings is recommended.

- Heterogeneous liver with large left-sided solid liver mass – 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. The solid liver mass favors the differential of a primary hepatic mass. This could be benign or malignant.

- Decreased corticomedullary distinction in both kidneys – The bilateral renal findings are consistent with age-related change.

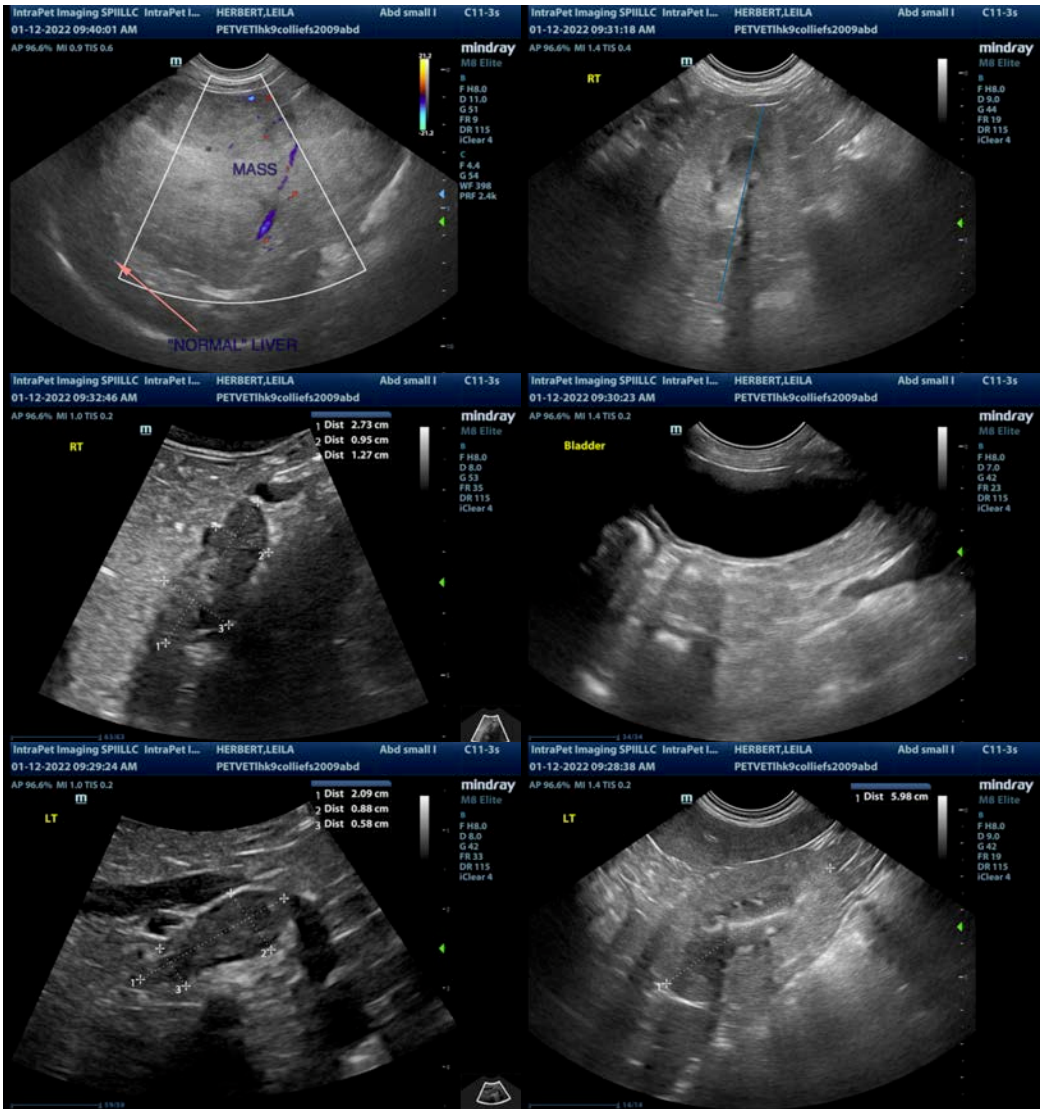
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

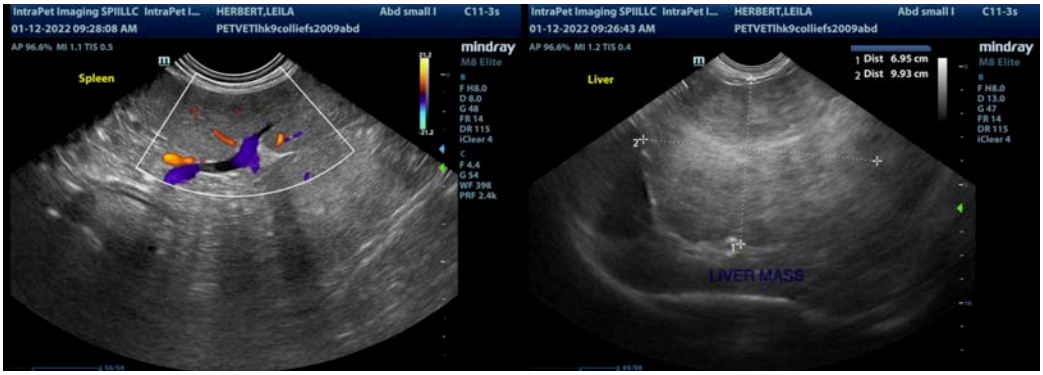
A large liver mass is visualized. Based on the size of this mass, I would suspect it is a primary liver mass. These lesions can get very large, but if able to be resected, can have a favorable prognosis. Consider a contrast CT scan to determine if surgery is an option. Recommend 3-view thoracic radiographs.

I suspect the liver mass is the cause for the liver enzyme elevations reported. However, I do not know if this is related to the recent episode of decreased appetite and vomiting. No focal bowel lesions are visualized. I suspect this could be a bout of gastroenteritis.

Both adrenal glands appear plump. It is possible that this patient also has pituitary dependent hyperadrenocorticism. If clinical signs consistent with this are present, consider adrenal function testing. This may be slightly difficult to interpret due to the concurrent medical issues going on. I would not test until she is feeling much better.

The neurologic/seizure type episode could be related to other findings, or could be a different problem. Recommend blood pressure evaluation. Consider the possibility of intermittent arrhythmias (syncopal episodes), and consider consultation with a veterinary neurologist. A pituitary macroadenoma could be a differential, but is somewhat atypical for these to cause seizures.





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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