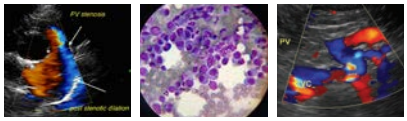
IMAGING PERFORMED BY

IntraPet.com



SonoPath

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DATE

1/6/22

PATIENT

Duke Grant

SPECIES

Canine

BREED

Chihuahua

SEX

Neutered Male

AGE

2006

WEIGHT

4.5 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Rachel Brilhart RDMS

HOSPITAL NAME

Alexander AH

REFERRING VET

Dr. Alexander

INVOICE

34051

PRESENTING CLINICAL SIGNS

Pet presented for 2nd opinion on ulcerative digital pad mass, but told by rDVM patient had a splenic tumor based on xrays and needed an U/S.

Medications: clavamox-62.5mg- 1/2 tab PO q.12hr and meloxicam- 4.5lb dose sid

Date of Previous IntraPet Ultrasound: No previous.
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 prostate is normal in size (0.61 cm) and shape for this neutered male dog. The parenchyma is homogenous and the external margins are smooth. The prostatic urethra appears normal with no evidence of irregularity, invasion, mass effect or calculi.

The left kidney has a normal shape and size (3.36 cm) with pyelectasia at 0.14 cm. Overall echogenicity is slightly hyperechoic with mildly decreased corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (3.28 cm). Overall echogenicity is slightly hyperechoic with mildly reduced 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 0.52 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 0.42 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. The spleen echotexture is heterogenous and mildly mottled, the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. There is a 0.24 cm focal hyperechoic nodule visualized within the parenchyma.

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 slightly hypoechoic mass effect that appears to be deviating the margins of the liver, measuring 1.71 cm x 1.35 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 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 uniform diameter with minimal fluid distension. Wall thickness is increased. Bowel loops follow a typical curvilinear path. Some areas have reduced detail of wall layering. Normal appearing bowel measures at approximately 0.4 cm with mucosal speckling evident. Visualized peristalsis appears appropriate. There are extensive focal areas of bowel that appear to have a severely thickened wall and complete loss of layering, creating almost a mass effect in some area. The thicker, ill-defined areas of bowel measured 0.55 cm. The more focal thickening is 0.89 cm. Additionally, at the root of the mesentery, there are very large lymph nodes and clusters of fluid-filled thickened bowel.

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

There is a scant amount of free abdominal fluid. There is a mass effect/large, irregular lymph node visualized at the root of the mesentery, measuring 4.54 cm x 1.39 cm. The omentum is of increased echogenicity around the abnormal bowel and lymph nodes.

PRIMARY FINDINGS

- Focal areas of bowel with complete loss of layering and severe thickening – Most consistent with infiltrative disease. Neoplasia is a primary concern (LMA, carcinoma, etc.)

- Heterogeneous liver with focal hypoechoic mass effect – 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. This mass could represent a benign or cancerous lesion, but the deviation in the hepatic margin is more concerning for a neoplastic process.

- Large, irregular lymph node/mass effect at the root of the mesentery – concerning for metastatic neoplasia. Recommend a fine needle aspirate.

SECONDARY FINDINGS

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

- Mildly mottled spleen with a small hyperechoic nodule – The diffuse splenic changes are non-specific and could be consistent with lymphoid hyperplasia, extramedullary hematopoiesis, infiltrative neoplasia, inflammation, other. Cytology or histopathology would be necessary to get a definitive

diagnosis.

- Prominent, mottled pancreas – The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.

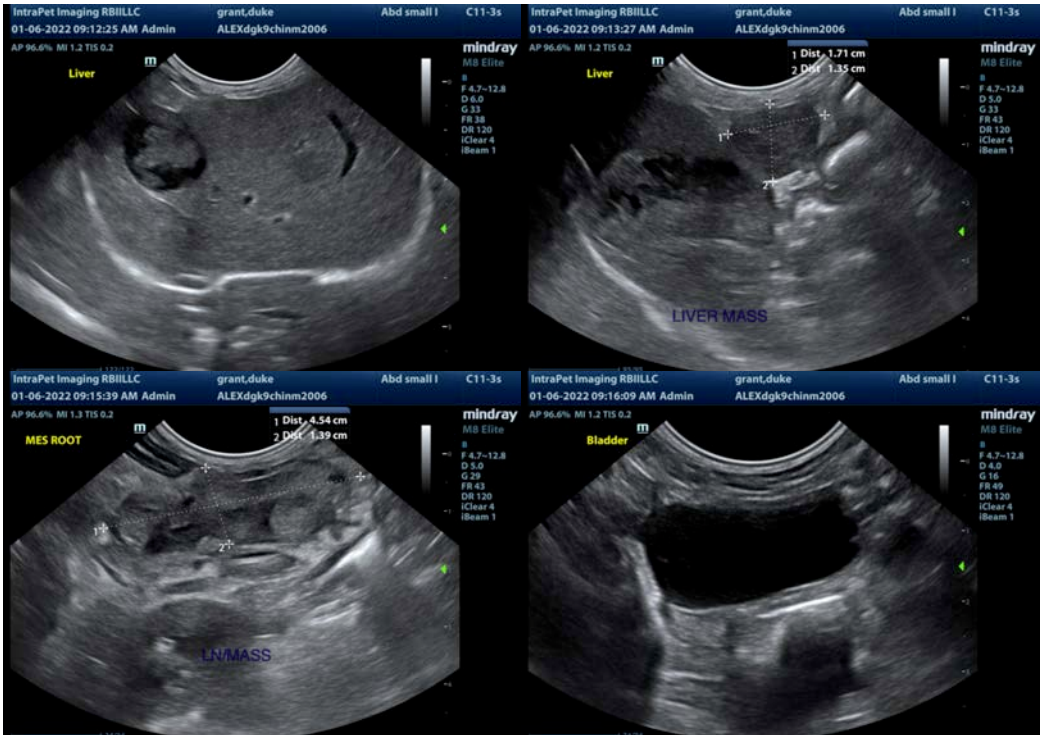
- Moderate debris within the gallbladder – The significance of the aggregated gallbladder sludge is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting.

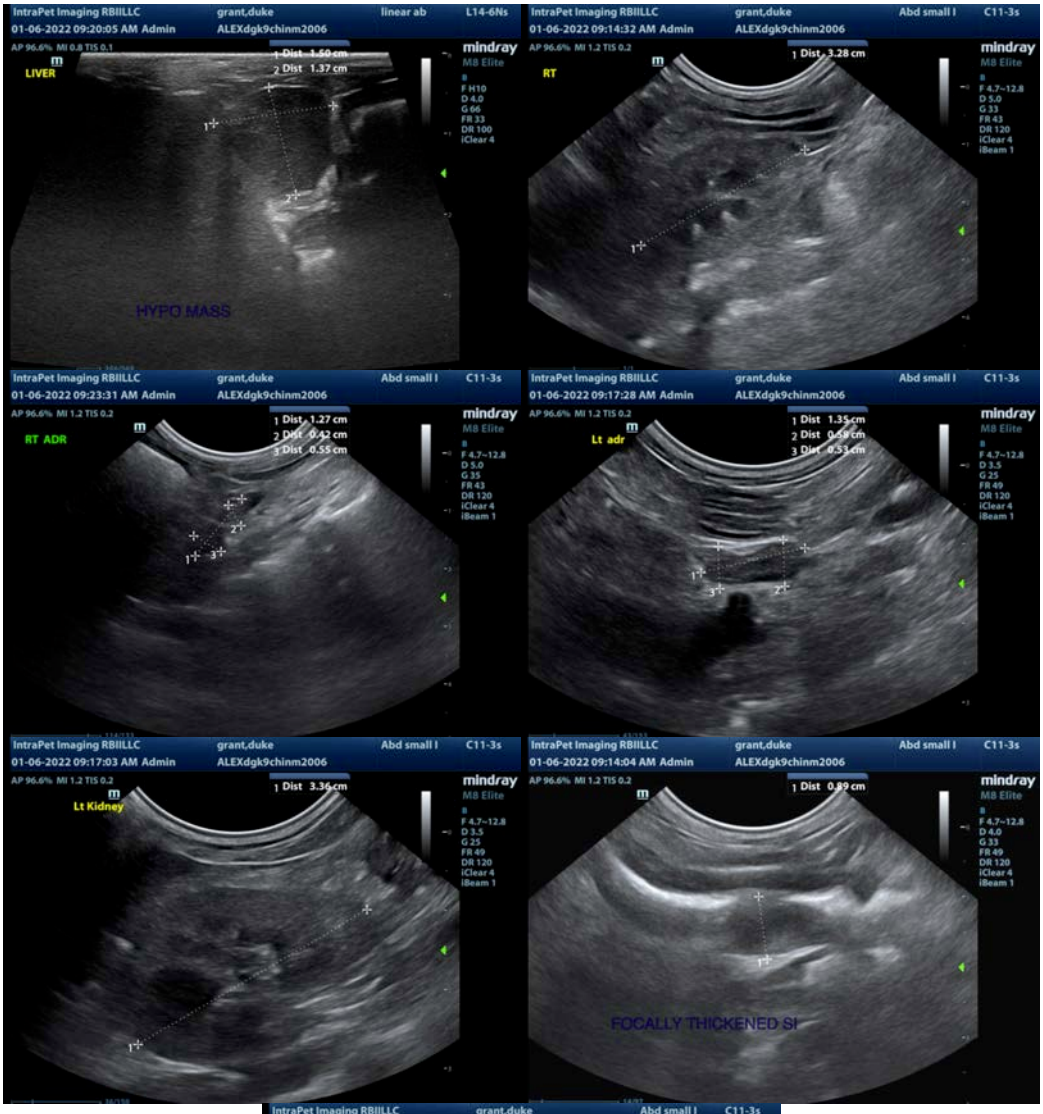
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

I am surprised that this patient came in for a relatively benign reason. The findings on today's ultrasound are most consistent with a neoplastic process in the abdomen involving the lymph nodes and bowel +/- liver. Other possibilities exist, but sampling is necessary to help differentiate.

- Consider a fine needle aspirate of the hepatic mass at the mesenteric root +/- bowel wall.
- Recommend 3-view thoracic radiographs.
- If a diagnosis cannot be obtained, consider surgical biopsies.

I suspect this is a non-resectable lesion.

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LIVER
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Spleen
HYPER NODULE
mindray
M8 Elite

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)
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