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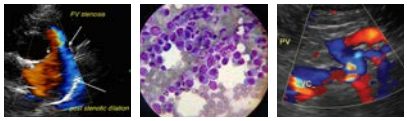

SonoPath
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DATE

6/9/22

PATIENT

Duck Maloney

SPECIES

Canine

BREED

Greyhound

SEX

Neutered Male

AGE

11/8/10

WEIGHT

67.1 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Stephanie Pearce RDCS, RVT

HOSPITAL NAME

Fullerton AH

REFERRING VET

Dr. Baker

INVOICE

38535

PRESENTING CLINICAL SIGNS

History: P was seen at ER for vomiting fever. diagnosed with lymphadenitis, FNA of the lymph nodes showed suppurative lymphadenitis of the mesentaric lymph nodes at Fall Road Animal Hospital. U/S showed splenomegaly. P is doing better now, E/D normal
No V/D/C/S. PE: Heart auscults with a normal rhythm and no murmurs, lungs auscult with normal bronchovesicular
sounds, lung sounds a are a little harsh, soft and non painful on abdominal palpation, submandibular, popliteal, axillary and prescapular lymph nodes palpate normally, corn on the paw pad of the left front digit 3, soft non painful on abdominal palpation

Current Medications: Doxycycline 100mg (1.5T BID), Clavamox 375mg (1.5T BID), Carprofen 100mg (1/2T BID), Gabapentin 300mg (2C BID). Gabapentin 300mg night before and 2-3 hours prior to AUS, Trazodone 150mg night before and 2 hours prior to drop off.
Lab Results: 5-9-22 CBC: WBC 20.36 H (5.05-16.76) Neu 14.7 H (2.95-11.64) H Bands suspected Lymph 2.79 H (1.05-5.1) H Mono 2.78 H (0.16-1.12) H PLT 98 (148-484) H MPV 14.5 H(8.7-13.2)H, GHP: wnl
Lytes: wnl.
Radiographs: 5-19-22 Lateral Thorax: spondylosis at T6-7 and 9-10, bronchial pattern, ingesta in the stomach, tip of the spleen is visible and appears rounded and enlarged
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: APPROVED.

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 visualized areas of prostate and surrounding tissue appear normal. Unfortunately, the prostate is not fully visualized likely due to its intrapelvic location. Correlate with rectal exam findings.

The left kidney has a normal shape and size (6.75 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 (7.71 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 adrenal glands were unable to be visualized due to interference by the enlarged lymph nodes in the abdomen.

Spleen

The spleen is large in size and irregular. The spleen echotexture is heterogenous and mottled. The blood flow through the hilus and splenic parenchyma appears normal. There is a very prominent, isoechoic mass effect/bulge visualized in the spleen, measuring approximately 6.9 cm in diameter.

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 small hypoechoic nodule visualized on the left side of the liver measuring 1.0 cm x 0.81 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 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. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed. There is a focal section of small intestine with severe thickening and loss of wall layering. In this area, the wall measures at 0.77 cm. The diameter of the bowel measured 2.56 cm. This abnormal area of bowel extends for over 5.0 cm and is most consistent with a focal bowel mass.

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 area of 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
There is a moderate to large amount of free abdominal fluid. There is a severe mesenteric lymphadenopathy present with mesenteric lymph nodes measuring 6.94 cm and 5.57 cm in diameter. The omentum is generally of increased echogenicity.

PRIMARY FINDINGS

- Focal area of small intestine with severe wall thickening and loss of layering – most consistent with a focal bowel mass. Round cell neoplasia would be a primary differential, after that carcinoma, other.

- Severe mesenteric lymphadenopathy – The severe mesenteric lymphadenopathy is most concerning for a neoplastic process, although you can see significant lymphadenopathy in some cases of autoimmune/inflammatory disease, infectious disease(tick born disease-such as bartonella, fungal infections, FIP (cats)) etc. A fine needle aspirate with cytology is recommended for further evaluation.

- Severely enlarged/abnormal, mottled spleen – 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. There is a large, isoechoic mass effect on the spleen, which could represent an atypical “bulge” or a true mass lesion.

- Large, heterogeneous liver with hypoechoic nodule – 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.

- Moderate to large abdominal effusion and moderate pleural effusion.

SECONDARY FINDINGS

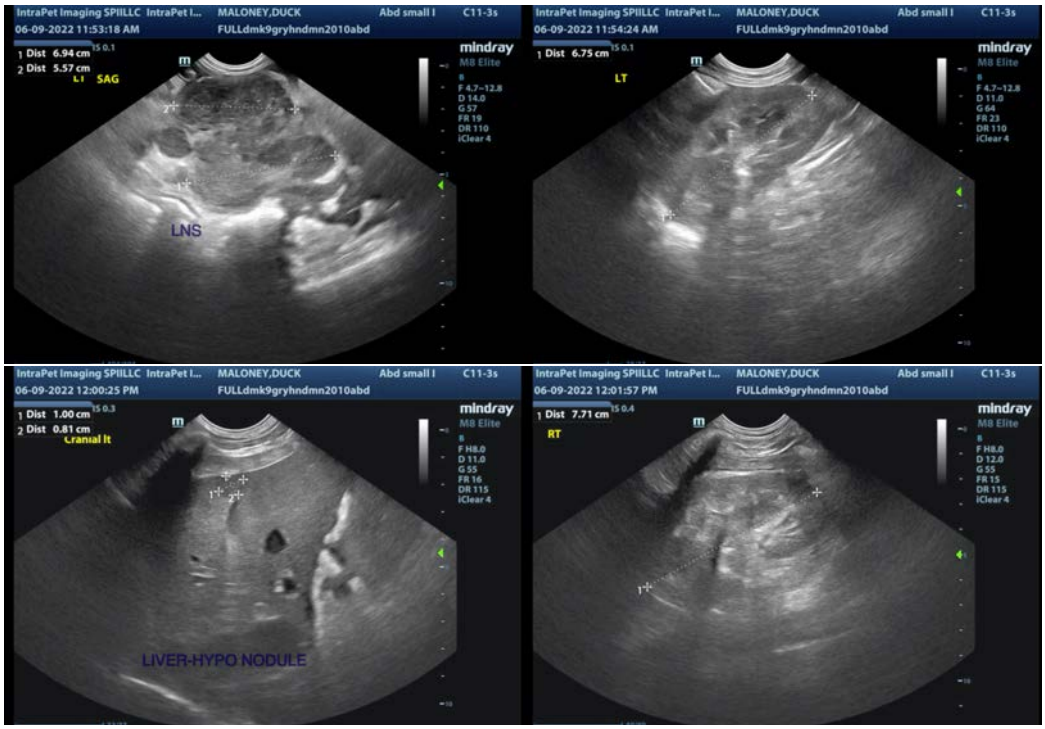
- Decreased corticomedullary distinction in both kidneys – The bilateral renal findings are consistent with age-related change.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There is a severely thickened focal section of small bowel with complete loss of layering, which is most consistent with a bowel mass in addition to severely enlarged mesenteric lymph nodes and a very irregular/abnormal spleen. Additionally, there is free fluid visualized in both the abdominal and thoracic cavities. These findings are very concerning for possible round cell neoplasia. Suppurative lymphadenitis is possible, but I typically would not see lesions in other organ systems (bowel mass, etc.). Options moving forward would include:

- Repeat cytology of an enlarged abdominal lymph node, spleen, and abnormal bowel. Additionally, a sample of abdominal fluid could be collected for fluid analysis and cytology.
- If a cytologic diagnosis is not possible, then biopsies could be considered.
- Recommend recheck thoracic radiographs.

This disease process appears to be affecting multiple organ systems. Infectious disease such as fungal disease is possible, but a current concern for metastatic neoplasia is high.

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BOWEL-THICK/LOSS OF LAYERING


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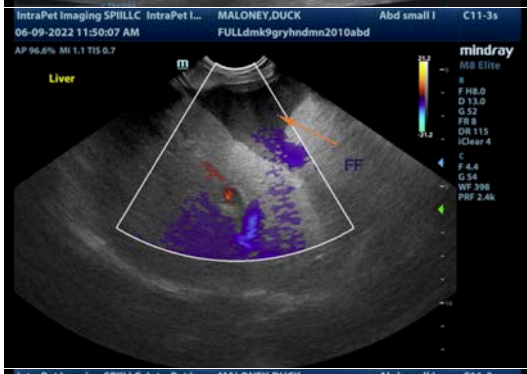
FOCAL ABNORMAL BOWEL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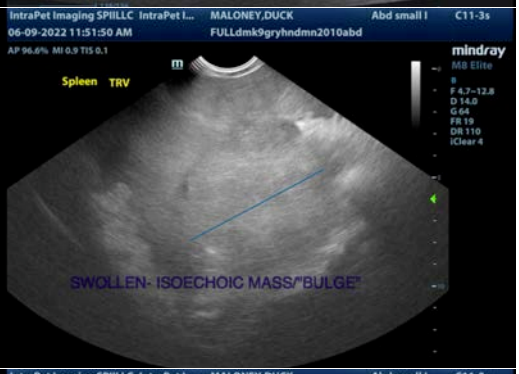
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Spleen TRV
SWOLLEN- ISOECHOIC MASS/"BULGE"


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BOWEL MASS


IntraPet Imaging SPIILLC IntraPet I... MALONEY,DUCK Abd small I C11-3s
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PLEURAL EFFUSION

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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