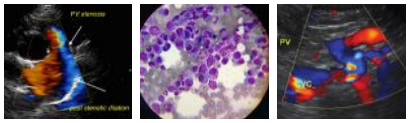
IMAGING PERFORMED BY

IntraPet.com



SonoPath
Clinical Sonography & Telecytology
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DATE

4/3/23

PATIENT

Dutch Marshall

SPECIES

Canine

BREED

American Staffordshire Terrier

SEX

Neutered Male

AGE

6/11/11

WEIGHT

64 Pounds

INTERPRETED BY

Beth Johnson, DVM DACVIM

HOSPITAL NAME

Banfield Columbia

REFERRING VET

Dr. Hirsch

INVOICE

21850

PRESENTING CLINICAL SIGNS

History: Dutch is an 11-year-old 29kg MN American Staffordshire Terrier. He was diagnosed with hypothyroidism in 2018 and has been on 0.8mg levothyroxine BID. Bloodwork performed 1/25/23 showed elevated T4 of 8.3 and ALT of 129 and ALKP of 359. Elevated liver enzymes were presumed to be secondary to iatrogenic hyperthyroidism. Levothyroxine was reduced to 0.4mg PO BID and thyroid was rechecked 2/24/2023 and was 2.0. Liver values rechecked 3/16/23 and ALT was 161 and ALKP 363. History of enlarged submandibular lymph nodes in 2020 and did a consult with Blue Pearl Oncology and was diagnosed with T zone lymphoma. No therapy initiated at that time and currently not undergoing therapy for T zone lymphoma. CBCs have been unremarkable.

Current Medications: Levothyroxine 0.8mg 1/2 tablet PO BID
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Stephanie Warga RDCS, RVT.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

Urinary bladder is adequately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

Prostate is normal in size, echotexture and echogenicity for a neutered male.

Left kidney is normal is size (6.11 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed. A 0.7 cm x 0.8 cm cortical cyst was noted.

Right kidney is normal is size (6.55 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed. Small cortical cysts are present in the right kidney.

Adrenal Glands

Left adrenal gland is normal in size (2.85 cm long x 0.85 cm at cranial pole and 1.06 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Right adrenal gland is normal in size (3.66 cm long x 1.1 cm at cranial pole and 0.79 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Spleen

Spleen is generally normal in size and shape with a smooth capsular contour. Parenchyma is diffusely nodular in appearance characterized by small discrete hypoechoic nodules. Splenic vasculature appears normal.

Liver

Liver is subjectively enlarged with mildly irregular margins. Parenchyma is heterogenous characterized by multiple poorly defined hypoechoic nodules within otherwise hyperechoic liver parenchyma. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.

Gastrointestinal

The visible stomach wall is normal in thickness and layering. The lumen of the stomach is mildly distended with echogenic non-shadowing luminal contents and gas consistent with normal ingesta. There is no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

The visible small intestines are normal in wall thickness and layering. Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

The visible colon is normal in wall thickness and layering. Contents are consistent with normal formed feces and gas.

Pancreas

The observed pancreas appears appropriately isoechoic to surrounding omental fat. Visible capsule is smooth and normal in contour. Visible pancreatic parenchyma is homogenous and unremarkable. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

Free Abdomen

There is no evidence of peritoneal effusion. Diffuse lymphadenopathy from sublumbar to mesenteric to cranial abdomen is noted.

Other

There is no evidence of heart base or pericardial pathology noted in these images at this time. If cardiac function evaluation is desired a full echocardiogram is recommended.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Heterogenous Liver – These changes are most consistent with benign processes such as nodular hyperplasia, steroid (vacuolar) hepatopathy, extramedullary hematopoiesis or possibly chronic inflammatory disease and less commonly infiltrative round cell or metastatic neoplasia.

- Splenic micronodular hyperplasia – This nodular change is often associated with benign aging nodular hyperplasia. Infiltrative neoplasia, however, including both early hemangiosarcoma as well as round cell neoplasia cannot be ruled out.

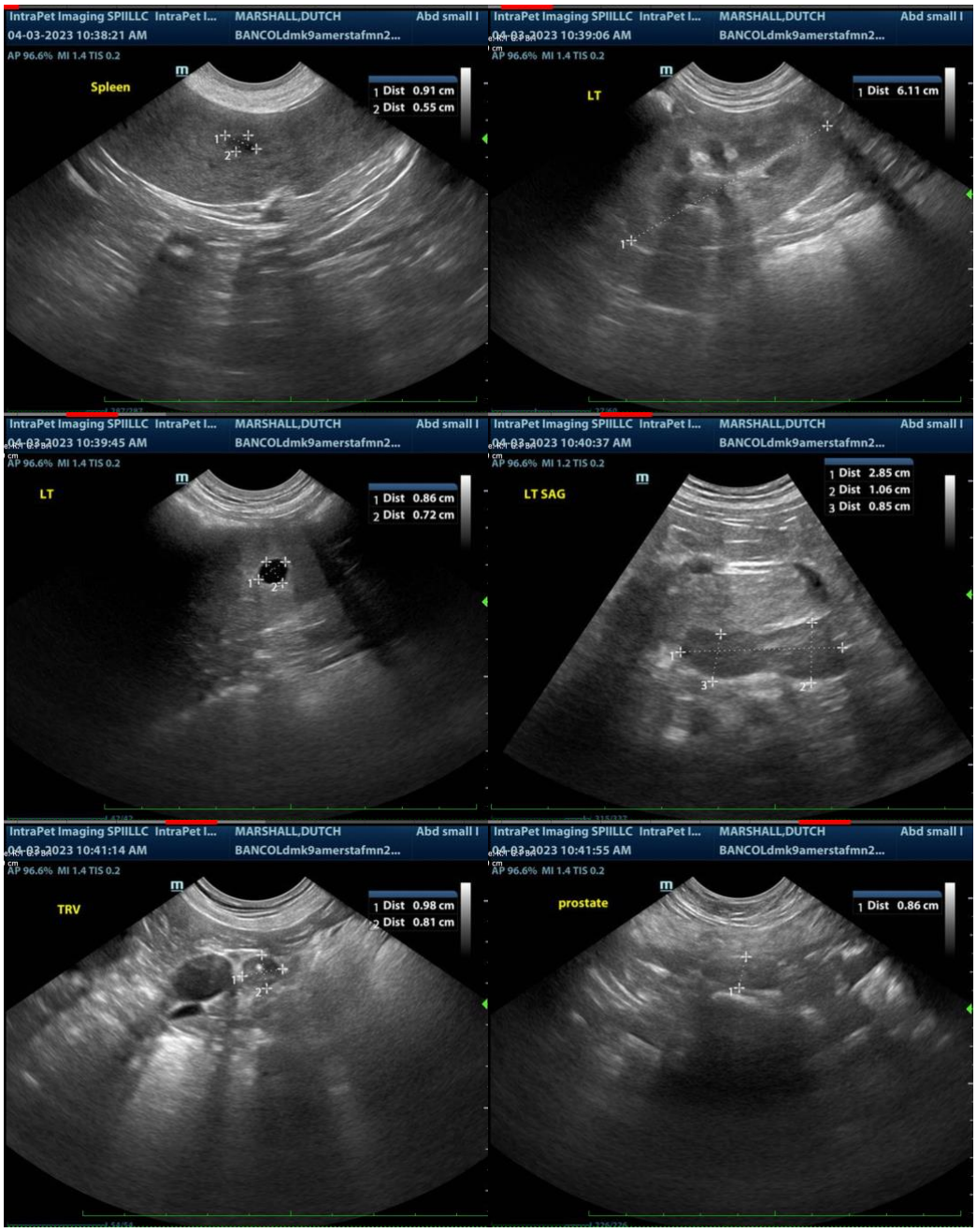
- Diffuse lymphadenopathy- Both reactive lymphadenopathy, as well as infiltrative neoplasia are differentials and cannot be differentiated without tissue sampling.

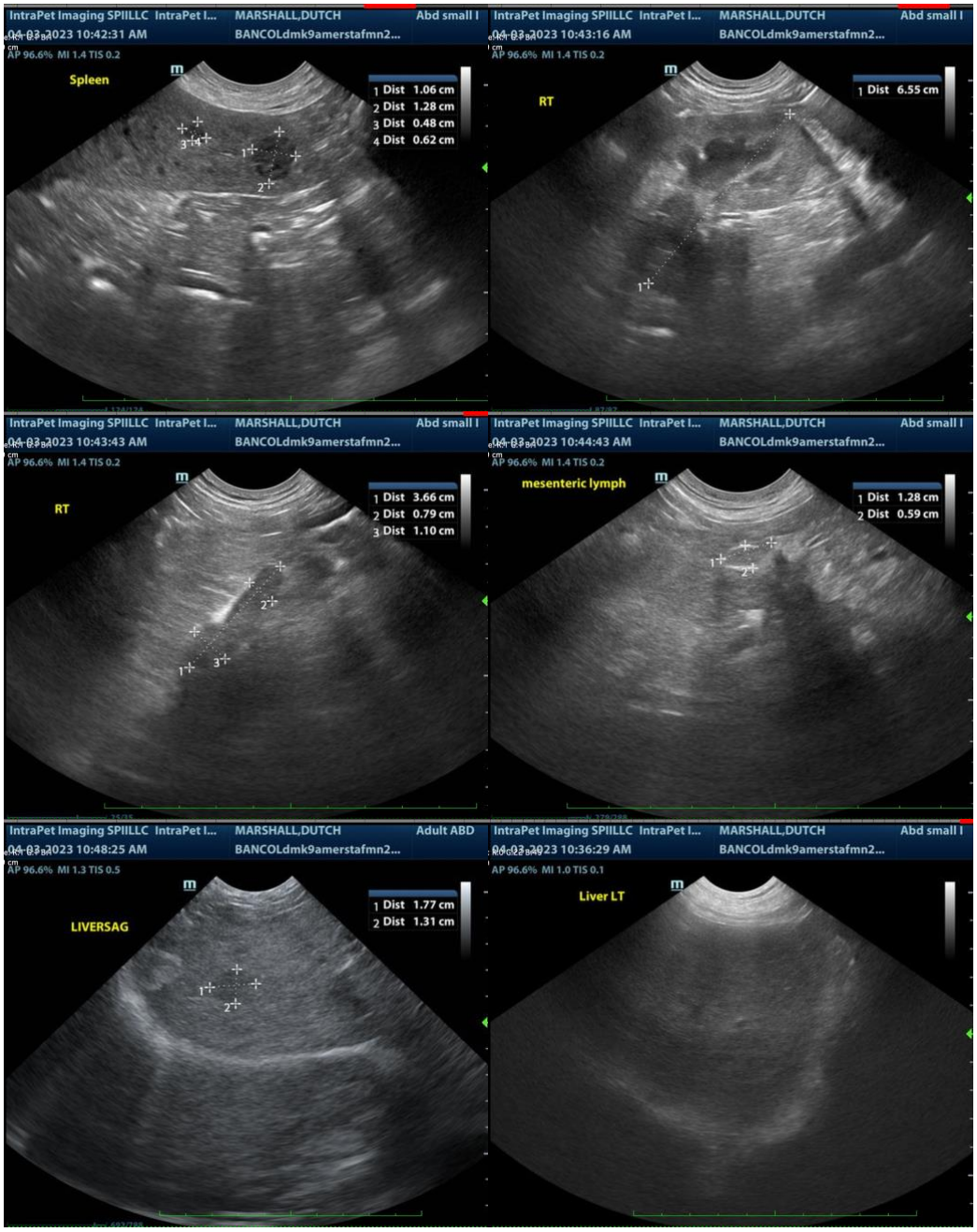
Secondary Findings

- Small bilateral renal cortical cysts

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

While the pathology described above can certainly be seen with benign change, given this patients history, infiltrative round cell neoplasia, such as lymphoma, has to be considered. Therefore, recommendations include fine needle aspirates of the spleen and liver, as well as the enlarged lymph nodes, if they can safely be reached, and if patients coagulation status is appropriate. Additionally, three view thoracic radiographs are recommended for further assessment of cardio-pulmonary status as well as to further evaluate for any evidence of metastatic disease, if not recently evaluated.

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AP 96.6% MI 1.4 TIS 0.2
Spleen
1 Dist 1.06 cm
2 Dist 1.28 cm
3 Dist 0.48 cm
4 Dist 0.62 cm
IntraPet Imaging SPIILLC IntraPet I... MARSHALL,DUTCH Abd small I
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RT
1 Dist 6.55 cm
IntraPet Imaging SPIILLC IntraPet I... MARSHALL,DUTCH Abd small I
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AP 96.6% MI 1.4 TIS 0.2
RT
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LIVERSAG
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IntraPet Imaging SPIILLC IntraPet I... MARSHALL,DUTCH Abd small I
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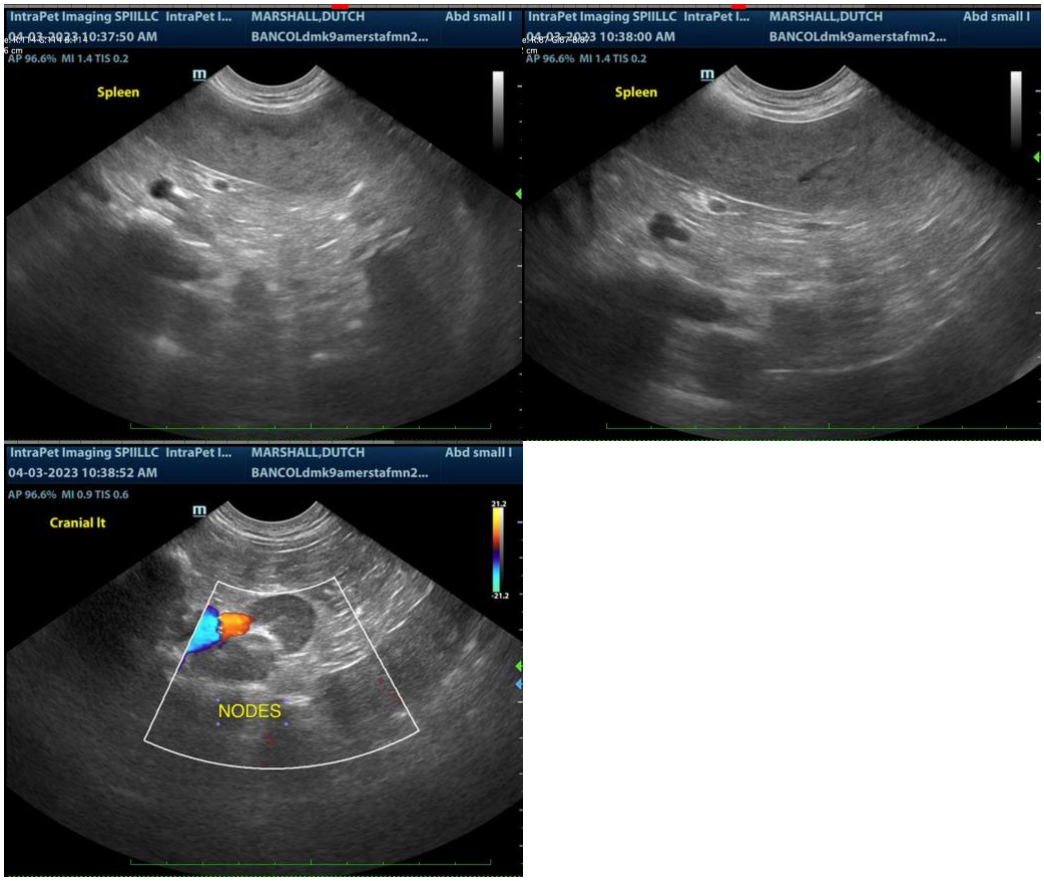
AP 96.6% MI 1.0 TIS 0.1
Liver LT



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.

Beth Johnson, DVM DACVIM
Beth.Johnson@SonoPath.com