

**DATE PRESENTING CLINICAL SIGNS**

11/29/22 11/25/22 presented for lethargy and pale mucous membranes- mm were light pink on exam, NSF on PE. Hx of arrhythmia (VPC's) Dx 11/15/22. Hx of presumed autoimmune skin disease treated with Prednisone and Cyclosporin - off meds since 05/1/22

PATIENT

Rigsby Treece

Current Medications: 11/17/22 start Thyroxin 0.4mg PO BID, 11/21/22 D/C Galliprant, start Deramaxx 100mg 1/2 PO SID, 11/25/22 D/C Deramaxx - last dose 11/24/22, 11/26/22 Start Prednisone 20mg 4 tabs PO SID x 4 days then 3 tabs PO SID, 11/25/22 Start Sucralfate 1 gram PO TID, 11/25/22 Start Omeprazole 40mg PO SID

SPECIES

Canine

BREED

Australian Shepherd

SEX

Neutered Male

Lab Results: 11/25/22: RBC 3.99 LOW (5.65-8.87), HCT 26.8 LOW (37.3-61.7 was 33.7 on 11/15/22), HGB 9.7 LOW (13.1-20.5), MCV 67.2 (61.6-73.5 fL), MCH 24.3 (21.2-25.9 pg), MCHC 36.2 (32.0-37.9 g/dL) RDW 19.5 (13.6-21.7), RETIC 0.9, RETIC 37.5 (10.0-110.0 K/ μ L) RETIC-HGB 23 (22.3-29.6 pg), WBC 36.48 HIGH (5.05-16.76 K/ μ L) NEU 10.1, LYM 48.9, MONO 40.4, EOS 0.6, BASO 0, NEU 3.70 (2.95-11.64 K/ μ L), BAND * Suspected * LYM 17.83 (1.05-5.10 K/ μ L), MONO 14.74 (0.16-1.12 K/ μ L), EOS 0.21 (0.06-1.23 K/ μ L), BASO 0 (0.00-0.10 K/ μ L), PLT 31 (148-484 K/ μ L est was 50-100K on 11/15/22), MPV 18.4 HIGH (8.7-13.2 fL)

AGE

4/1/12

PDW 9.1-19.4 fL, PCT 0.06 LOW (0.14-0.46), Blood smear confirmed low Platelet count. Date of Previous IntraPet Ultrasound: No previous.

WEIGHT

92.4 Pounds

Sedation: Not required to complete full diagnostic ultrasound. Stat Report: Not requested.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**INTERPRETED BY**Beth Johnson, DVM
DACVIM**Urinary System**

The urinary bladder is moderately 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.

IMAGING PERFORMED BY

The area of the prostate is examined without evident pathology.

Andi Parkinson RDMS

HOSPITAL NAME

The right kidney is normal in size (8.12 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.

Timonium AH

REFERRING VET

The left kidney is normal in size (8.14 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.

Dr. Brand

Adrenal Glands

The right adrenal gland is normal in size (2.9 cm long x 0.70 cm at the cranial pole and 0.64 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

INVOICE

43015

The left adrenal gland is normal in size (2.22 cm long x 0.39 cm at the cranial pole and 0.54 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

Spleen

Spleen is subjectively large in size with a swollen and scalloped/undulating capsular contour. Multifocal coalescing nodules are noted throughout the parenchyma. Splenic vasculature appears normal. Enhanced hyperechoic surrounding fat is noted.

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.

The 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 stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) and layering. The lumen of the stomach is empty with 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 (canine duodenum < 0.5 cm and feline duodenum < 0.4 cm; other < 0.3 cm). 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 (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

Pancreas

The pancreatic parenchyma is appropriately isoechoic to surrounding tissue. Visible capsule is smooth and normal in contour. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

Free Abdomen

There is no evidence of free peritoneal effusion noted in these images.

Hypoechoic, prominent sublumbar lymphadenopathy is noted, measuring 3.69 cm long x 1.54 cm thick.

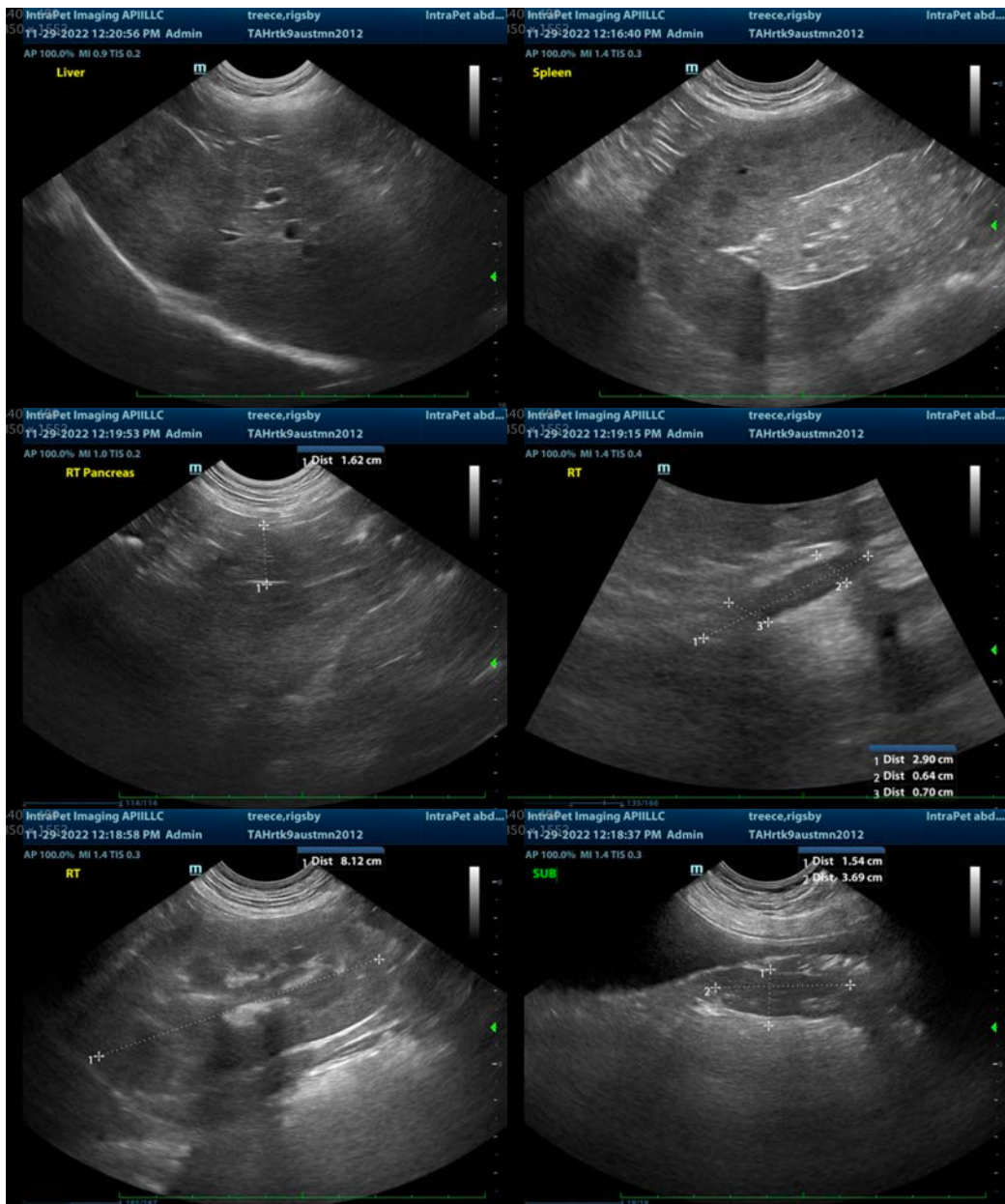
No evidence of pericardial effusion.

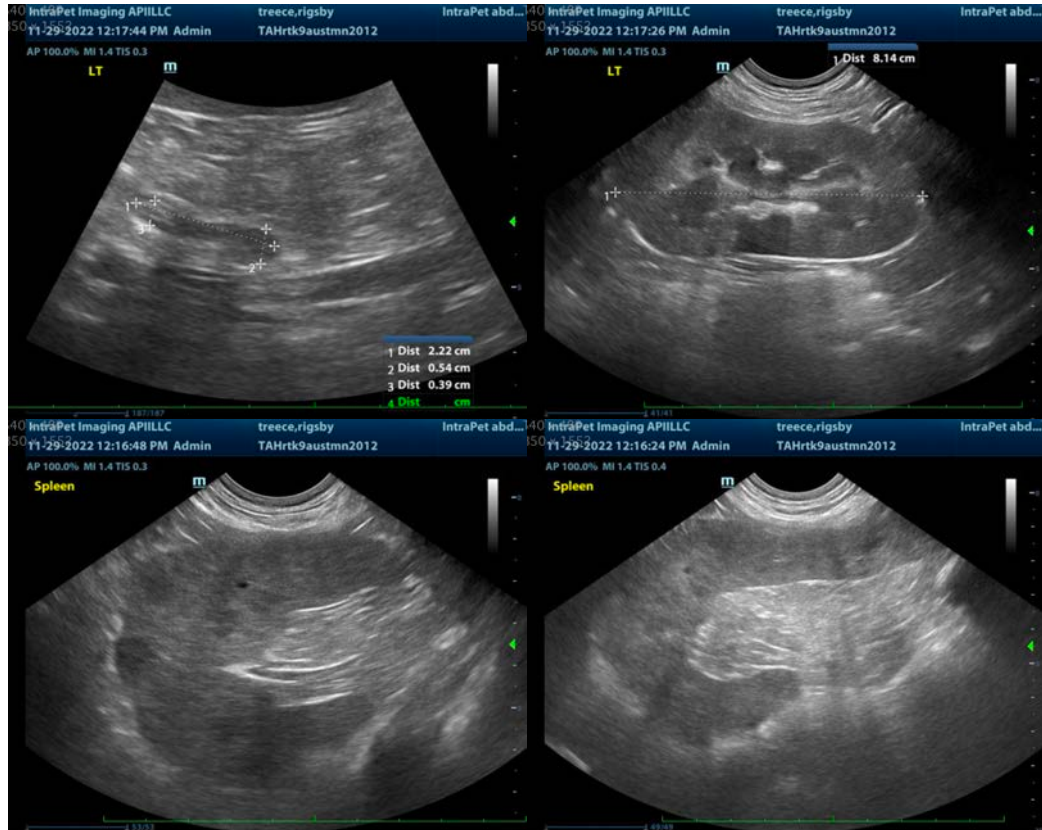
ULTRASONOGRAPHIC FINDINGS

- **Nodular Spleen** – This finding is strongly suggestive of infiltrative disease such as round cell neoplasia. Benign disease cannot be ruled out but is considered less likely.
- **Heterogenous Liver** – These changes could represent a benign processes such as nodular hyperplasia, steroid (vacuolar) hepatopathy, extramedullary hematopoiesis or possibly chronic inflammatory disease. However, given the patient's history and concurrent splenic pathology, infiltrative round cell or metastatic neoplasia must also be considered.
- **Sublumbar lymphadenopathy** – Both reactive lymphadenopathy as well as infiltrative neoplasia are differentials and cannot be differentiated without tissue sampling.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Given the abdominal pathology, infiltrative neoplasia including round cell neoplasia is a consideration as the underlying cause for this patient's reported anemia and thrombocytopenia. However, given the reported anemia/thrombocytopenia, benign changes including extramedullary hematopoiesis, infectious disease, etc. must also be considered. Ideally, if the thrombocytopenia is mild and/or improves with medical management already reported in place, a fine needle aspirates of the spleen +/- the liver +/- the sublumbar lymph node are recommended. If aspiration of abdominal organs is not considered safe due to thrombocytopenia, bone marrow cytology could be considered as an alternative approach to potentially ruling in or out round cell neoplasia versus other. Additionally, comprehensive infectious disease testing is recommended.





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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