

**DATE PRESENTING CLINICAL SIGNS**

9.27.2022

Progressive non-ambulatory tetraparesis, now also has cranial nerve changes (nystagmus, absent menace and blink OD). Icteric, petechiae in oral cavity, injected mm and episcleral injection, diffuse erythema on ventrum/inguinal region. History of fever. Thrombocytopenic. Emerging oral ulcers.

**PATIENT**

Mabel Joy Merchant

Current Medications: Clavamox, Carprofen, Gabapentin

Lab Results: Labs pending today, most recent labs at ER: 9/23 chem: ALP 339, K 3.3, Cl 108. Coags normal. 9/26 CBC: neuts 13K w/suspect bands, lymphs 5K, monos 1.7K, PLT 43K.

**SPECIES**

Date of Previous IntraPet Ultrasound: No previous.

Canine

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

**BREED**

Imaging Performed By: Andi Parkinson, BS, RDMS.

Pitbull Mix

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****SEX****Urinary System**

Spayed Female

The **urinary bladder** is normal in thickness and the mucosal surface is smooth. The bladder is moderately distended. A small amount of suspended, echogenic debris is observed within the lumen. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

**AGE**

10.1.2012

The **left kidney** is normal size (7.60 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild to moderate loss of corticomedullary distinction. Moderate pyelectasia is present (0.72 cm in the longitudinal plane). There is no evidence of nephroliths, infarcts or hydroureter. There is suspected subnormal blood flow. Renal vasculature is normal.

**WEIGHT**

29.5 kg

The **right kidney** is normal size (7.70 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild to moderate loss of corticomedullary distinction. Moderate pyelectasia is present (0.72 cm in the longitudinal plane). There is no evidence of nephroliths, infarcts or hydroureter. There is suspected subnormal blood flow. Renal vasculature is normal.

**INTERPRETED BY**

Andrea Nicastro, DMV,  
Diplomate DACVIM  
(Small Animal  
Internal Medicine)

**Adrenal Glands**

The **left adrenal gland** is normal size (0.73 cm at cranial pole) (0.85 cm at caudal pole) (2.44 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

**HOSPITAL NAME**

Nexus Veterinary  
Specialists

The **right adrenal gland** is normal size (0.83 cm at cranial pole) (0.74 cm at caudal pole) (2.28 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

**REFERRING VET**

Dr. Steele

**INVOICE**

11711

**Spleen**

The **spleen** is subjectively prominent in size with slightly swollen peripheral contours. The parenchyma is subjectively hypoechoic and homogenous in appearance. No distinct focal lesions are observed. There is no obvious evidence of a thrombosis. However, blood flow within the splenic vasculature appears subjectively subnormal.

**Liver**

The **liver** is normal to slightly prominent in size with normal curvilinear peripheral contours. The parenchyma is of appropriate echogenicity and echotexture. A 0.91 cm hypoechoic nodule is observed on

the right side. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion.

The **gall bladder** is moderately distended. The wall is diffusely thickened (up to 0.70 cm) and edematous with a “double-walled” effect. Luminal contents are mostly anechoic. The cystic and common bile ducts are normal/not seen.

### ***Gastrointestinal***

The **gastric lumen** is mildly to moderately distended with fluid and ingesta. Within the gastric lumen, shadowing material is observed. The gastric wall is normal in thickness with a normal layering pattern. The small intestinal lumen is not dilated. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. There is no evidence of an obstructive pattern.

### ***Pancreas***

The right limb is prominent to enlarged with swollen peripheral contours and edematous/mottled parenchyma. No distinct focal lesions are observed. The pancreatic duct is not overtly dilated. The base and limbs of the pancreas are isoechoic to surrounding omental fat. No focal lesions are observed. There is no evidence of peripancreatic inflammation or effusion.

### ***Free Abdomen***

There is no obvious evidence of free fluid. Several prominent to enlarged, mildly hypoechoic mesenteric **lymph nodes** are visualized, the largest measuring 6.49 cm in length.

## **ULTRASONOGRAPHIC FINDINGS**

### **Primary Findings**

- The prominent abdominal lymph nodes could be consistent with lymphadenitis, lymphoid hyperplasia, or infiltrative neoplasia (i.e., lymphoma).
- The gall bladder wall changes could be consistent with cholecystitis, increased hydrostatic pressure, low oncotic pressure, autoimmune disease, anaphylaxis, other.
- The splenic changes could be consistent with passive congestion, extramedullary hematopoiesis, lymphoid hyperplasia, antigenic stimulation, splenitis, or less likely, infiltrative neoplasia.

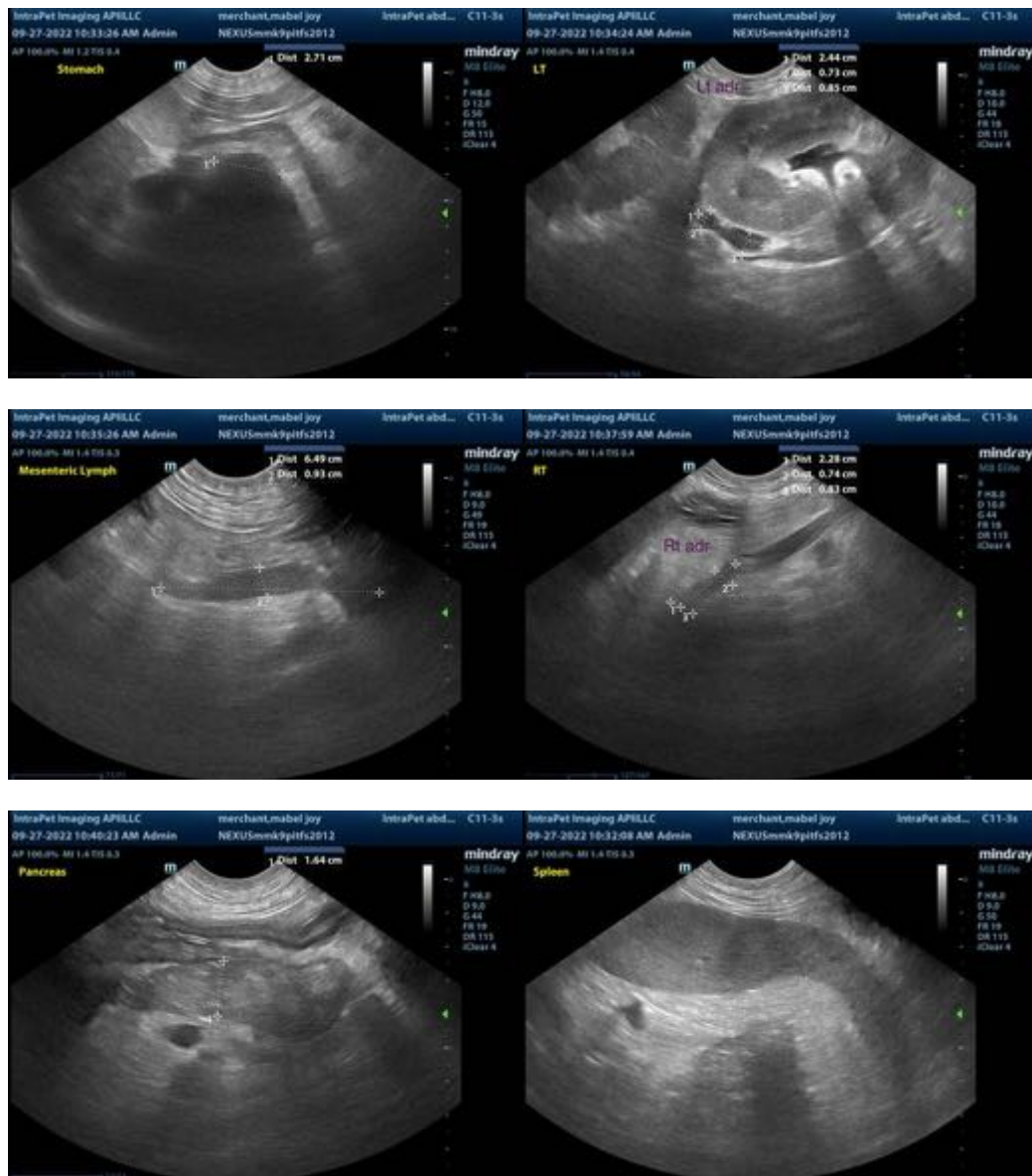
### **Secondary Findings**

- The shadowing material within the gastric lumen could be consistent with foreign material and/or normal ingesta. It appears nonobstructive at this time.
- The pancreatic changes could be consistent with passive congestion or pancreatitis with suspected age-related remodeling.
- Bilateral, chronic, degenerative renal changes. The bilateral pyelectasia may be resulting from age-related remodeling, pyelonephritis, fluid therapy (if applicable) or some combination thereof.
- The hepatic changes may be a normal variant for this patient or may be secondary to passive congestion, early vacuolar hepatopathy, infiltrative neoplasia (unlikely), other. The hypoechoic hepatic nodule trends toward the benign with a lower possibility of emerging neoplasia.

\*Due to the concern for subnormal blood flow in some organs, there is concern for general passive congestion, or potentially, microthrombi. Given the constellation of clinical signs and sonographic changes, considerations include infectious disease (i.e., tick-borne), autoimmune disease or infiltrative neoplasia.

### INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Further diagnostic and treatment recommendations are to be implemented by Dr. Cara Steele.





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.

**Andrea Nicastro, MPH, DVM, Diplomate DACVIM (Small Animal Internal Medicine)**  
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