

**DATE**

03/06/2023

**PRESENTING CLINICAL SIGNS****PATIENT**

Mitch Graham

Pet recently presented for acute onset of lethargy, hyporexia and weakness, no obvious cause. Labwork showed moderate globulin increase and low grade anemia. Pet has a history of chronic low grade anemia, mild ALKP elevation and intermittent globulin elevation with similar ADR episodes in years past. Has previously been

**SPECIES**

Canine

treated with amoxicillin and showed improvement. Pet is currently improving with supportive GI treatment (cerenia) and amoxicillin. Planned ultrasound to evaluate low grade anemia and screen for geriatric issues. History of hypertension and osteoarthritis, on carprofen, gabapentin and enalapril long-term.

**BREED**

Mixed

Current Medications: CERENIA INJECTION- PER ML 2/28/2023, Flexadin Advanced 60ct 10/25/2022, ENALAPRIL 20 MG. 10/5/2022, CARPROFEN 100 MG. 10/4/2022, Bravecto 44-88 lbs #4 7/28/2022, Heartgard Plus (51 - 100 lbs, 12ct) 7/28/2022

**SEX**

NM

Lab Results: 2/28/23: PCV 33, glob 5.1, ALKP 227. 10/25/22: HCT 36%, glob 3.9, ALKP 202, chol 375. 6/2/22: HCT36, ALKP 201, glob 4.4, chol 346

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By:

**AGE**

2012

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****WEIGHT**

80.6lb

**Urinary System**

The urinary bladder, trigone, and pelvic urethra presented normal thicknesses and normal tone. The ureters were not visible which is normal. No uroliths or sediment were visualized, and anechoic urine was present. No evidence of inflammatory or neoplastic changes were noted. Ureteral papillae were normal.

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

The kidneys revealed largely normal size and structure, corticomedullary definition and ratio (cortex 1/3 of medulla) were essentially maintained with some mild age-related loss of curvilinear patterns regarding the capsule and C/M junction. The cortices presented a largely uniform texture with some increased echogenicity expected for his age patient. Medullary structure differed distinctly from that of the cortex and no evidence of pelvic dilation was present. The left kidney measured 7.0 cm in length. The right kidney measured 6.27 cm in length.

**HOSPITAL NAME**

Everhart Veterinary  
Hospital

**Adrenal Glands****REFERRING VET**

Dr. Notarangelo

Both adrenal glands were visualized and recognized as having normal shape, size, position and echogenicity for this breed. The phrenic vasculature, glandular echogenicity and detail were unremarkable. Capsule, cortex, and medullary definition were normal for this age patient. The left adrenal gland measured 2.74 cm in length by 0.43 cm caudal pole width by 0.45 cm cranial pole width. The right adrenal gland measured 2.75 cm in length by 0.65 cm caudal pole width by 0.6 cm cranial pole width.

**INVOICE**

13116ag

**Spleen**

The spleen presented a smooth homogeneous parenchyma hyperechoic to liver and renal cortical parenchyma. The capsule was smooth without noticeable expansion or deviation from within the spleen or adjacent pathology. The splenic vasculature demonstrated normal volume without signs of congestion or thrombosis. No sonographic evidence of acute or chronic inflammatory, neoplastic, or infarctual changes were noted.

### ***Liver***

The liver images submitted revealed minor increased portal markings with subjectively normal liver size, contour, and structure. Parenchymal echogenicity was naturally coarse and hypoechoic to the spleen.

The gallbladder walls were echogenic and fibrosed, consistent with porcelain gallbladder. The cystic and common bile ducts were normal. No pathological hepatic lymphadenopathy was evident.

### ***Gastrointestinal***

Examination of the gastrointestinal tract revealed a stomach and intestine free of stasis, of normal wall thickness, acceptable curvilinear mural detail, and peristaltic activity. Small and large intestine demonstrated normal luminal chyme and stool consistency respectively. No obstructive or overt infiltrative disease was noted. No associated abnormal lymphatic activity was noted.

### ***Pancreas***

The base and limbs of the pancreas were observed to be largely isoechoic to surrounding omental fat. Pancreatic duct and capsular contour were acceptably normal, and parenchyma respected normal curvilinear patterns. No overt evidence of active inflammatory or neoplastic disease was noted.

### ***Other***

Rapid view of the heart revealed normal right auricle with no evidence of masses. Trace amount of pericardial effusion was noted measuring up to 2 cm of separation from the epicardium. Internal volume to contractility appeared normal.

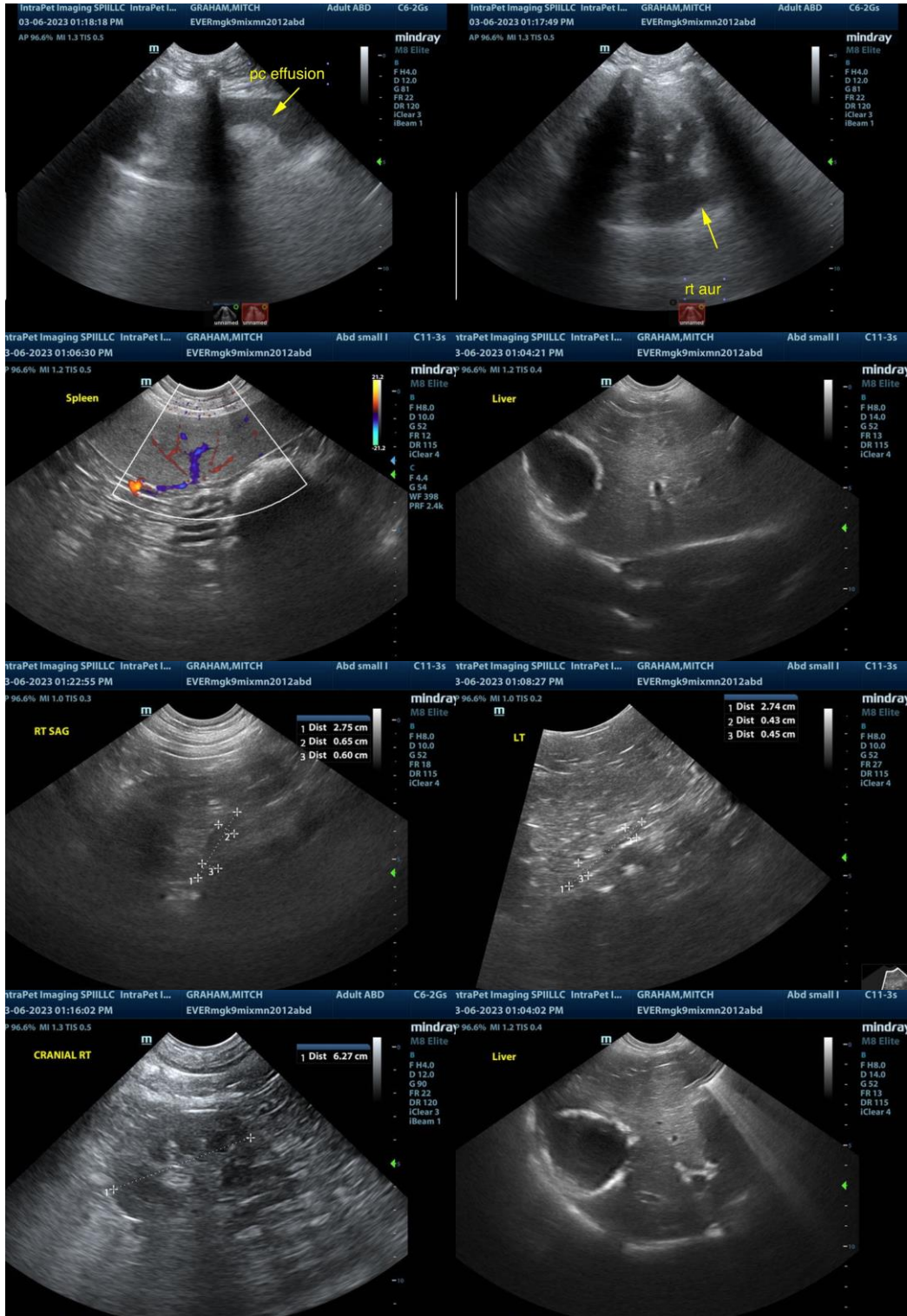
## **ULTRASONOGRAPHIC FINDINGS**

- Minor pericardial effusion- no obvious masses yet neoplastic event cannot be ruled out, idiopathic pericardial effusion, pericarditis, occult neoplasia all possible
- Porcelain gallbladder
- Otherwise, geriatric abdomen

## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

A full echocardiogram is recommended.

No evidence of related abdominal pathology.



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.

**Eric Lindquist, DMV, DABVP, Cert. IVUSS, CEO of SonoPath.com**  
Eric.Lindquist@SonoPath.com