

**DATE**

10/5/22

**PRESENTING CLINICAL SIGNS**

Recent urinary tract infection (went to ER 8/24/2022) diagnosed with rods and started on Clavamox; had a large amount of hematuria with blood clots. Recheck on 9/16/2022 with stranguria-started on amoxicillin and clinical signs improved; most recent UA did revealed resolved UTI, in-house culture negative. hx adrenal nodules progressing proteinuria (now 5.8), has lost weight (~15 lbs over past year)

**PATIENT**

severe arthritis

Amber Houghton

Current Medications: metronidazole 500 mg tabs PO BID X 14 days (almost finished course) finished 2 week course amoxicillin

Telmisartan 40 mg PO q 24 hours, Adequan, Galliprant, Gabapentin for OA PRN.

**SPECIES**

Canine

Lab Results: 9/13/2022: SP GRAVITY 1.034, PH 7.0, PROTEIN 3+

WBC UAM 2-5 HPF 0 - 5, RBC UAM 2-5 HPF, BACTERIA NONE SEEN

CASTS: OCC FINE GRANULAR (0-1)/LPF, U PRO/CREA 5.8

SDMA 13 ug/dL 0 - 14, CREA 0.9 mg/dL 0.5 - 1.5, BUN/UREA 35 mg/dL 9 - 31, Sodium 144 mmol/L 142 - 152, Potassium 4.6 mmol/L 4.0 - 5.4, Chloride 110 mmol/L 108 - 119, Na/K Ratio 31 28 - 37 : | :

ALB 3.1 g/dL 2.7 - 3.9, ALT 101 U/L 18 - 121, ALKP 490 U/L 5 - 160 : : | HIGH; Last BP was 7/2022 160-170 (pet very anxious)

**BREED**

Labrador

Date of Previous IntraPet Ultrasound: 8/7/19, 12/4/19, 1/27/21. See attached.

**SEX**

Spayed female

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Rachel Brillhart, RDMS.

**AGE**

4/3/09

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****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 was noted. Ureteral papillae were normal.

**WEIGHT**

96.4 lbs

The **kidneys** revealed largely normal size and structure, corticomedullary definition and ratio (cortex 1/3 of medulla) were essentially maintained with some age-related loss of curvilinear patterns regarding the capsule and C/M junction. The cortices presented 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 7.81 cm. The right kidney measured

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**HOSPITAL NAME**

Frederick Road VH

**Adrenal Glands**

The right adrenal nodule has not expanded to 2.6 x 2.3 cm and was deriving from the cranial pole. The right adrenal gland in its entirety measured 4.37 x 2.3 cm at the cranial pole and 1.15 cm at the caudal pole. The left adrenal nodule has expanded to a mass that measures 3.2 cm, caudal pole 1.25 cm. The left adrenal gland measured 4.92 cm in length with capsular expansion without capsular escape.

**REFERRING VET**

Dr. Beyer

**Spleen**

The **spleen** revealed multi-focal nodule measuring up to 1.3 cm at the caudal pole with areas of capsular expansion and an overt, isoechoic mass measuring 3.05 cm at the mid body.

**INVOICE**

39939

**Liver**

The **liver** revealed an expansive, isoechoic nodule measuring 2.8 cm with heterogenous changes noted elsewhere. The gallbladder and common bile duct were unremarkable.

### ***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***

Diffuse hyperechoic changes were present in the area of the **pancreas**. The pancreatic remodeling was evident with multifocal to diffuse hyperechoic changes. These changes are consistent with fibrosis, amyloid, saponification of fat and may contain areas of low-grade chronic active inflammation especially if pain on imaging (+ Murphy sign) was present +/- focal subxiphoid palpation reveals pain response. No overt masses were noted.

### **ULTRASONOGRAPHIC FINDINGS**

Progressive, bilateral adrenal nodular changes. Adenoma, myelolipomas and carcinomas are all possible. Both appear to have lack of vascular invasion.

Splenic nodules and an overt mass as well as hepatic nodular changes noted. Nodular hyperplasia versus emerging round cell neoplasia with a potential for hemangiosarcoma deriving from the spleen.

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

Full adrenal work-up is warranted. FNA is warranted upon the spleen and liver for further definition.





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.

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