

**DATE PRESENTING CLINICAL SIGNS**

1/30/23

Recent history of weight loss despite good appetite. Historical grade II-III/VI murmur. See attached for previous abdominal ultrasound report.

PATIENTPugsley Senior Dog
Sanctuary

Current Medications: HG/NG, Pimobendan 5mg PO q12h, apoquel, fortiflora, Dasuquin, Denamarin.

Lab Results: Previous history: 6/7/22 - CBC WNL. Chemistry - Calcium 12.7 (H), Cl 105 (L), Alb 4.1 (H), ALT 151 (H), ALKP 417 (H).

SPECIES

Canine

ProBNP 1016 (H). T4 1.4 (wnl). 6/20/22 - CBC - MCV 77 (H). Chemistry - Calcium 12.2 (H), Cl 106 (L), Alb 4.0 (H), ALP 248 (H). T4 1.7 (wnl). Fecal negative. 7/24/22 - CBC - WNL. Chemistry - K 3.9 (L), Na:K ratio 38 (H), ALB 4.0 (H). 8/19/22 - CBC - MCHC 32.5 (L). Chemistry - Alb 4.2 (H), AST 14 (L), ALKP 190 (H). T4 1.9 (wnl). 8/22/22 - Urinalysis - USG 1.020, pH 6.0, trace protein, WBC 10-15/hpf, Rare cocci, 3-5 epithelial cells/hpf. E. coli cultured. 9/26/22 - Recheck by HomeVets after surgery and dental. 11/8/22 - Seen by HomeVets for chewing at right front forearm. Dispensed Apoquel and animax to manage suspected dermatitis. 12/9/22 - CBC WNL. Chemistry - Cl 107 (L), TCO2 30 (H), ALKP 275 (H), GGT 15 (H), Lipase 1075 (H), CK 213 (H).

BREED

Mix

Urinalysis - USG 1.026, quiet sediment. T4 = 1.5 (wnl). Fecal - Roundworm positive antigen.

SEX

Netuered male

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Andi Parkinson, BS, RDMS.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

8/30/11

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

32.3 lbs

The prostate was mildly enlarged and measured 1.34 cm and was mildly heterogenous. This would be normal for a late neuter.

INTERPRETED BYEric 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 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. Mineralization was noted in the kidneys. The left kidney measured 6.27 cm. The right kidney measured 6.45 cm.

HOSPITAL NAME

North Laural AH

Adrenal Glands**REFERRING VET**

Dr. Steere

The left **adrenal gland** was mineralized with fairly normal in contour and measured 3.12 x 1.09 cm at the caudal pole and 1.12 cm at the cranial pole. Generalized enlargement was present. The phrenic vein was not invaded in this patient. The right adrenal gland was at the upper limits of normal and measured 2.71 x 1.04 cm at the cranial pole and 0.92 cm at the caudal pole.

INVOICE

42430

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 was noted.

Liver

The **liver** revealed uniform enlargement with coalescing, hypoechoic nodular changes. This is consistent with nodular hyperplasia. 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

The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Some parenchymal remodeling, however, with mild deviation from curvilinear normalcy was observed. Pancreatic duct and capsular irregularities were present consistent with age related changes. If pain upon imaging (+ Murphy sign) was present or if the patient is focally painful in subxiphoid palpation then low-grade smoldering chronic pancreatitis should be suspected.

ULTRASONOGRAPHIC FINDINGS

Chronic pancreatic changes. Low-grade inflammation is possible.
Subjectively benign hepatopathy with nodular hyperplasia, vacuolar hepatopathy pattern.
Age related renal changes with mineralization.
Dystrophic mineralization in the left adrenal gland and mildly enlarged right adrenal gland.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

FNA of the liver is warranted for further definition. PDH with benign dystrophic mineralization in the left adrenal gland is possible. Emerging carcinoma is a potential, yet unlikely. If the patient appears Cushingoid then work-up for adrenal dependent or pituitary dependent hyperadrenocorticism can be considered. FNA of the liver +/- bile acid profile is indicated. Given the pyuria treatment for UTI is warranted over a 4-6 week period given the chronic renal changes. Embedded infection within the kidneys is a potential.







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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