

**DATE**

6/8/22

PATIENT

Lexi Bopst

SPECIES

Canine

BREED

Brussels Griffon

SEX

Spayed Female

AGE

3/7/07

WEIGHT

16 Pounds

INTERPRETED BYEric Lindquist, DMV
DABVP, Cert. IVUS**IMAGING PERFORMED BY**Stephanie Pearce
RDCS, RVT**HOSPITAL NAME**

Westminster VH

REFERRING VET

Dr. Hall

INVOICE

38539

PRESENTING CLINICAL SIGNS

Patient presented for PU/PD at home on 5/20/2022. Pet has a history of pancreatitis, seizures, heart murmur. Pet was originally slated for abdominal US last year (06/2021) but pet dislocated her hip and required surgery. Pet has been doing well since then until the recent PU/PD. On PE, pet was BAR, apparently adequately hydrated. Lenticular sclerosis OU, periodontal disease appreciated. Grade 2/6 systolic murmur appreciated with strong synchronous pulses.

Current Medications: Glucosamine, HW and flea/tick prevention. Gabapentin 70mg PO upon arrival to hospital.

Lab Results: 5/20/22: CBC: Reticulocytes: 111K/uL (10-110); platelets: 597K/uL (143-448); Chemistry: Creatinine: 1.8mg/dL (0.5-1.5); BUN: 53mg/dL (9-31); Phosphorus: 6.5mg/dL (2.5-6.1); Potassium: 5.9mmol/L (4-5.4); Chloride: 103mmol/L (108-119); TCO2: 28mmol/L (13-27); Total Protein: 7.6g/dL (5.5-7.5); Globulin: 4.2g/dL (2.4-4.0); ALT: 141U/L (18-121); amylase: 1,754U/L (337-1469); Lipase >1,800U/L (0-250); UA: SG: 1.017; Protein: 3+; 5/23/22: Cortisol Normal 3.2ug/dL (2.0-6.0)

Radiographs: 6/15/21: Cardiology Report: Mild degenerative valve disease Mild mitral valve and tricuspid valve regurgitation causing heart murmur; Decreased left heart dimensions - rule out: secondary to hypovolemia; Mild-moderate left ventricular wall thickening - suspected pseudohypertrophy from hypovolemia; Normal heart muscle function.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Torbugesic IV.

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 were noted. Ureteral papillae were normal.

The **right kidney** 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 right kidney measured 4.43 cm.

The **left kidney** presented corticomedullary mineralization, minor pyelectasia, and slight ill-defined pelvic fat. The left kidney measured 4.14 cm.

Adrenal Glands

Both **adrenal glands** were visualized and recognized as having largely normal shape, size, position and acceptable echogenicity for this age group and breed. Some heterogeneity was noted within the adrenal parenchyma without concerning capsular distortion. These changes are likely age related but should be monitored by sonogram should the patient be suspected of having adrenal disease. Nodular irregularity to the right adrenal gland noted. The right adrenal gland measured 1.72 cm x 1.01 cm.

Spleen

The **spleen** was volume contracted with hyperechoic mineralization, not likely pathological.

Liver

The **liver** was uniformly swollen with minor, excessive gallbladder debris and over distension with dependent and suspended bile without evidence of overt mucocele formation. However, excessive sludge was present. The liver presented coarse architecture with mildly increased portal markings and subtle, mixed echogenic changes. This is consistent with vacuolar hepatopathy and some level of remodeling and history of inflammatory component. There was no overt suspicion of neoplasia.

Gastrointestinal

The **stomach** presented minor luminal fluid. The pylorus and gastrointestinal wall structure were unremarkable. Normal stool in the colon.

Pancreas

The **pancreas** was heterogeneous, hypoechoic, and mildly irregular in the right limb. The remainder of the pancreas was unremarkable.

Heart

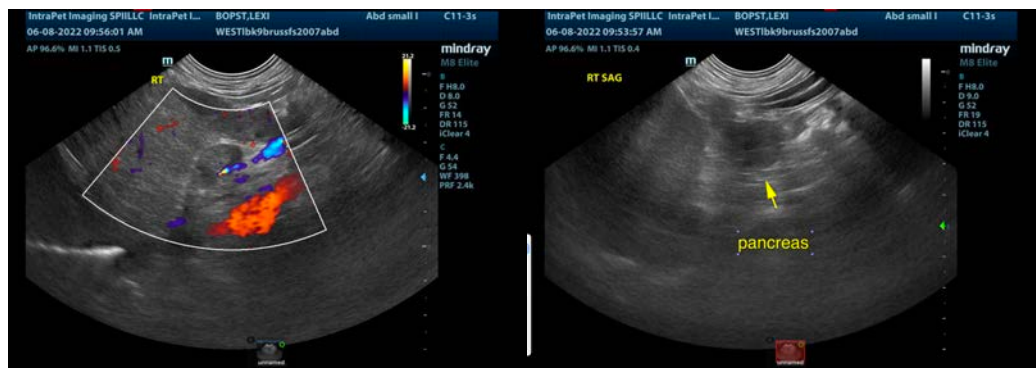
Rapid view of the heart revealed no evident pathology.

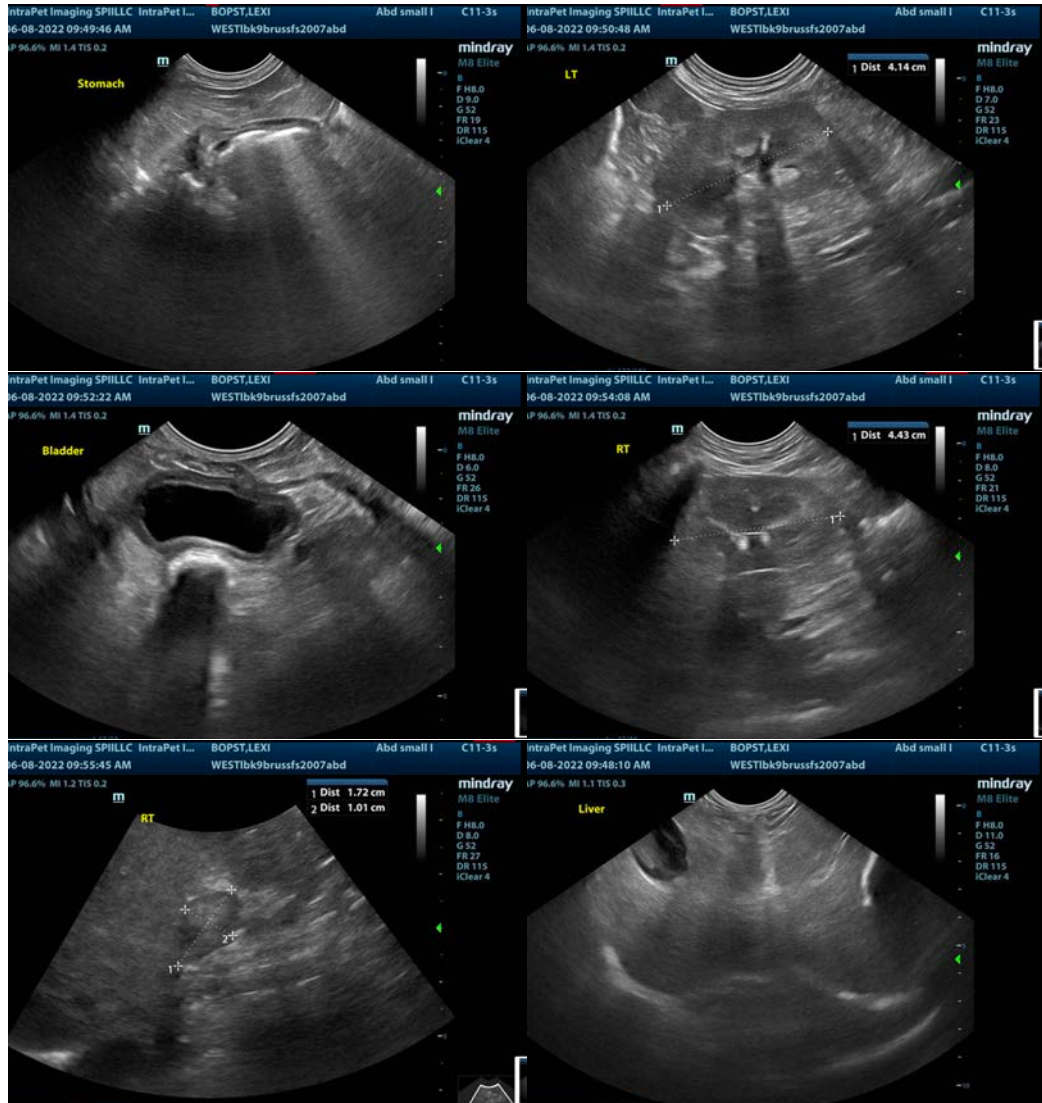
ULTRASONOGRAPHIC FINDINGS

- Benign hepatopathy with minor remodeling – largely age related change.
- Mild degenerative renal changes with slight pyelectasia
- Possible right limb pancreatitis
- Nodular right adrenal gland – possibility of emerging pheochromocytoma or carcinoma versus adenomatous or hyperplastic change. Appears resectable.
- Volume contracted spleen

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Underlying UTI, acute renal insult, Addison's, Leptospirosis all potentials in this patient. 72-hour IV fluid protocol, blood pressures, urine culture all indicated. If hypertension is an issue, urine catecholamine warranted given the nodular change in the right adrenal gland. The right adrenal gland should be monitored for any progression over the next month.





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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