



PATIENT

Shadow McDonald

SPECIES

Canine

BREED

Mixed Yorkie

SEX

Neutered male

AGE

10 years

WEIGHT

11.8 lbs

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Dr. Bartus

HOSPITAL NAME

Valley Veterinary
Service

REFERRING VET

Dr. Bartus

INVOICE

94310

DATE

12/6/21

PRESENTING CLINICAL SIGNS

History: Diagnosed diabetic 2 yr ago. Gets 8 units Vetsulin BID and eats Purina Obesity Management dog food. Recently PU/PD, urinary accidents daily,; abdominal distention and thinning haircoat gradually worsening over 6 months.

Abnormal PE/Chem/CBC/UA Results: Normal chemistries except for glucose 421 about 3 1/2 hr after injection & meal. Normal CBC. U/A sp. gr. 1.035 Glu 1000, neg Ket, neg Prot, quiet sediment

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.

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. Slight, hyperechoic medullary rim sign was noted. The cortices presented largely uniform texture with some increased echogenicity expected for this age patient. Medullary structure differed distinctly from that of the cortex and no evidence of pelvic dilation was present. The right kidney measured 4.78 cm. The left kidney measured 4.56 cm.

Adrenal Glands

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 right adrenal gland measured 2.16 x 0.77 cm at the cranial pole and 0.79 cm at the caudal pole. The left adrenal gland measured 2.22 x 0.7 cm.

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** 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.



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Gastrointestinal

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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.

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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.

SEX

Neutered male

ULTRASONOGRAPHIC FINDINGS

Unremarkable abdomen with mild to moderate non-specific degenerative renal changes.

AGE

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Adrenal glands are at the upper limits of normal for this patient, structurally unremarkable.

Benign hepatopathy and minor remodeling.

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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Given that the urine is still well concentrated underlying atypical Cushing's is possible as the urine specific gravity is well concentrated. Urine culture and sensitivity is warranted as glucosuria to rule out underlying UTI that may be playing a role or antibiotic trial given the frequent UTI in diabetic patients.

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Potential Causes of Diabetic Dysregulation

This is a suggestive checkoff list when faced with an unregulated diabetic patient:

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UTI

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Dietary indiscretion/intolerance

Pancreatitis

Hyperthyroidism/hypothyroidism

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Exogenous steroids (including topical eye meds)

Cushing's

Acromegaly

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Owner compliance

Insulin quality issues

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Antibodies to insulin

Underlying Neoplasia



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Diffuse liver disease

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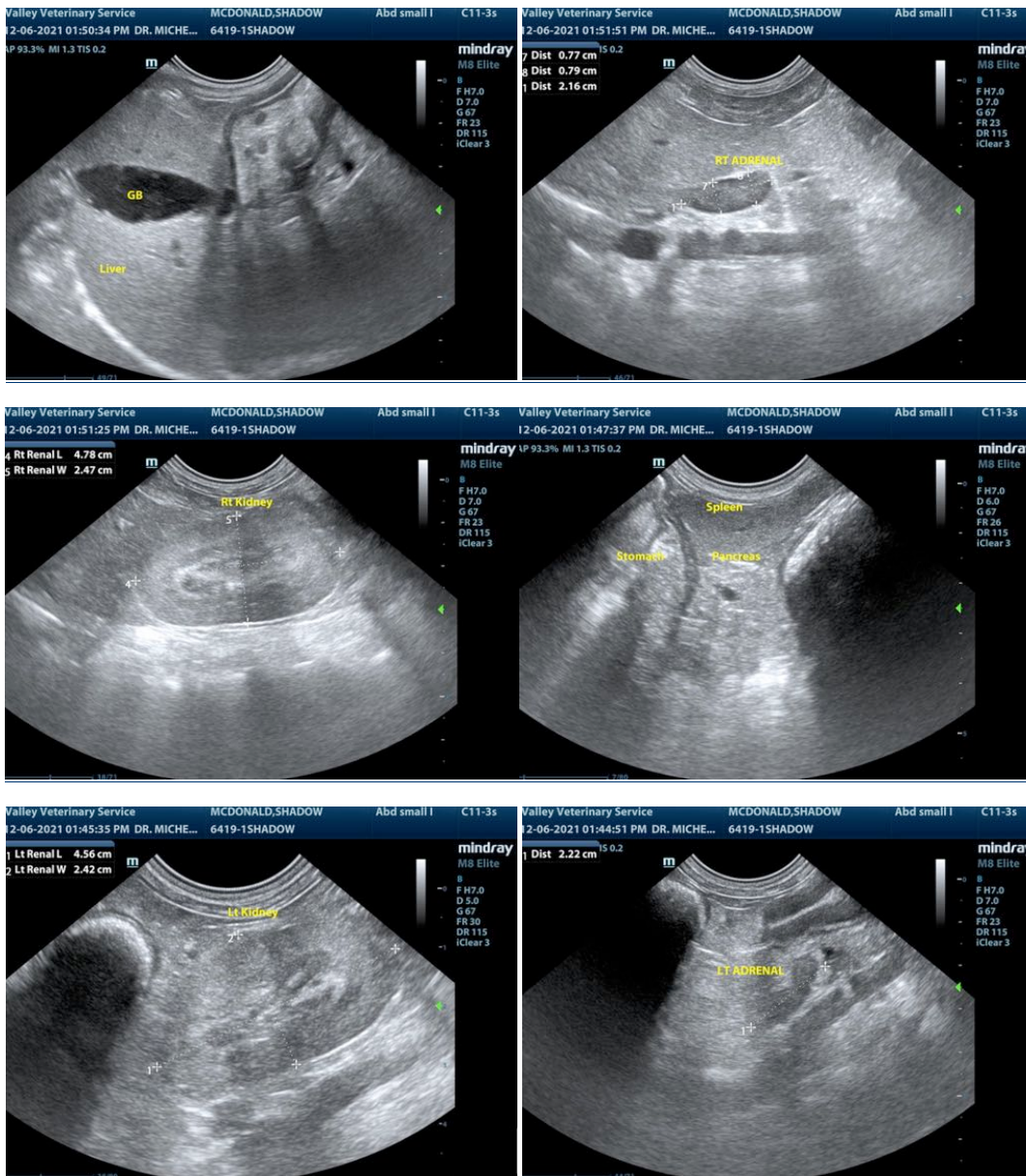
Dr. Bartus

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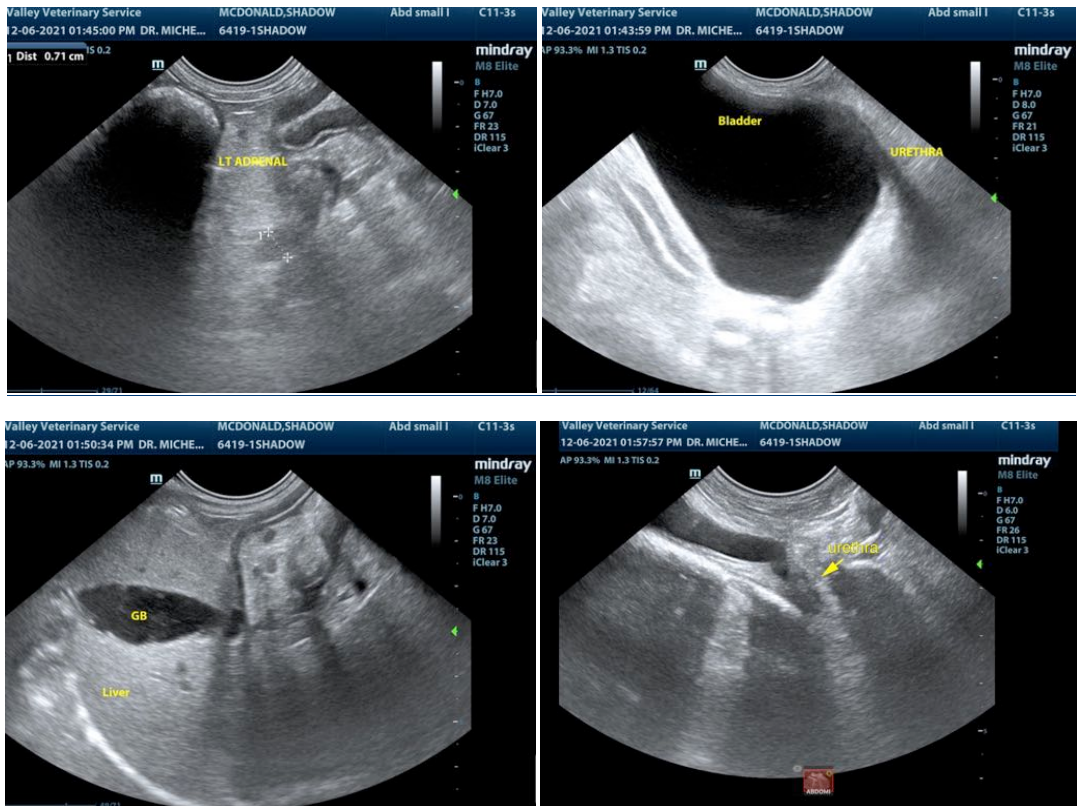
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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
info@SonoPath.com