



PATIENT

George Graham

SPECIES

Canine

BREED

Minature Schnauzer

SEX

NM

AGE

15 years, 1 months
and 1 week

WEIGHT

10.4 kg

INTERPRETED BY

R. McKenzie Daniel,
DVM, DABVP
(Canine and Feline)

IMAGING PERFORMED BY

Dr. Jill Rankin

HOSPITAL NAME

Little Creek Vet
Clinic

REFERRING VET

Corlene Sadler,
DVM

INVOICE

10667

DATE

2/26/26

PRESENTING CLINICAL SIGNS

History:

- Presented for 1 week hx of excessive drinking and urination. Owner reports he is drinking double his normal water intake and needs to urinate q3 hours. Hx of bladder crystals, seen in Jan for increased respiratory effort at night. Suspected osteoarthritis, which the owner feels is worsening. BW and U/a performed in house: CBC, Mild lymphopenia ($0.98 \times 10^9/L$) and thrombocytosis ($545 \times 10^9/L$). Chemistry: markedly elevated ALP (1951 U/L), elevated ALT (248 U/L), mildly elevated GGT (13 U/L) and hypercholesterolemia (10.9mmol/L). Kidney values and electrolytes are within normal limits. Urinalysis (free catch): very dilute urine with a specific gravity of 1.008, pH is 5.0, trace protein. No active sediment. No obvious masses or free fluid in the abdomen during a quick scan.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, and cystourethral junction exhibited normal thickness and tone. Anechoic urine was present in the lumen with no uroliths or sediment. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes were noted.

The area of the residual prostate appeared normal and free of pathology

No evidence of pathology in the area of the aortic trifurcation.

Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio was maintained. The medulla and cortices were uniform in texture with some increased echogenicity and mild loss of corticomodullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. Areas of mild medullary mineral were present. The left kidney measured 5.9 cm in length. The right kidney measured 4.8 cm in length.

Adrenal Glands

The bilateral adrenal glands were mildly enlarged a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.65 cm width at the caudal pole. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.63 cm width at the caudal pole.

Spleen

The spleen exhibited primarily finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. Intermittent small hyperechoic nodules were present. The capsule was smooth and regular without apparent expansion. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis. Acute to chronic inflammatory or neoplastic changes were not noted. The echogenic nodules tend to trend benign and are most consistent with benign hyperplasia or myelolipomas.



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Liver/ Gallbladder

The liver presented mild hepatomegaly with a rounded symmetrical capsule contour. Primarily homogeneous, mildly increased hepatic parenchyma echogenicity exhibiting mild coarse echotexture. Intermittent discreet hypoechoic intraparenchymal nodules were present. The hepatic and portal vasculature were normal in appearance without signs of congestion. An example of a liver nodule measured 1.1 cm in diameter. The gallbladder was non-distended in size containing primarily anechoic content with mild, non-organized gallbladder debris. The cystic and common bile ducts were normal.

Gastrointestinal

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach was empty without evidence of retained ingesta, fluid, or foreign material.

The small intestine presented intact wall layering with 1:3 muscularis/mucosa ratio. The lumen of the small intestine was empty with no signs of ileus, obstruction, or foreign material.

Normal visible colon wall layers were present with formed feces in lumen.

Pancreas

The pancreas was normal in size and contour with isoechoic to mildly heterogeneous parenchyma compared to adjacent omentum. No signs of active inflammation or neoplasia.

Free Abdomen

No overt lymphadenopathy or peritoneal effusion was present.

ULTRASONOGRAPHIC FINDINGS

- Hepatopathy exhibiting discreet intraparenchymal nodules – suggestive of vacuolar hepatitis pattern with probable discreet hyperplasia or hematopoiesis, other inflammatory hepatopathy, nonobstructive cholestasis, less likely emerging to occult hepatic neoplasia all potentials
- Nonorganized gallbladder debris (non mucocele)
- Mild chronic renal changes with mild medullary mineral
- Mild bilateral adrenomegaly
- Mild pancreatic remodeling
- Small hyperechoic splenic nodules – consistent with benign criteria, i.e., small myelolipomas, nodular hyperplasia, or emerging mineralization

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Adrenal workup with LDST is recommended, given the patient's clinical signs and decreased urine specific gravity. Hepatosupportive medications, including Denamarin and Ursodiol, may prove beneficial. Sonographic reassessment of the gallbladder is indicated if evidence of progressive cholestasis. Further renal staging to include urine C/S and protein: creatinine ratio on a sterile urine sample may be considered.



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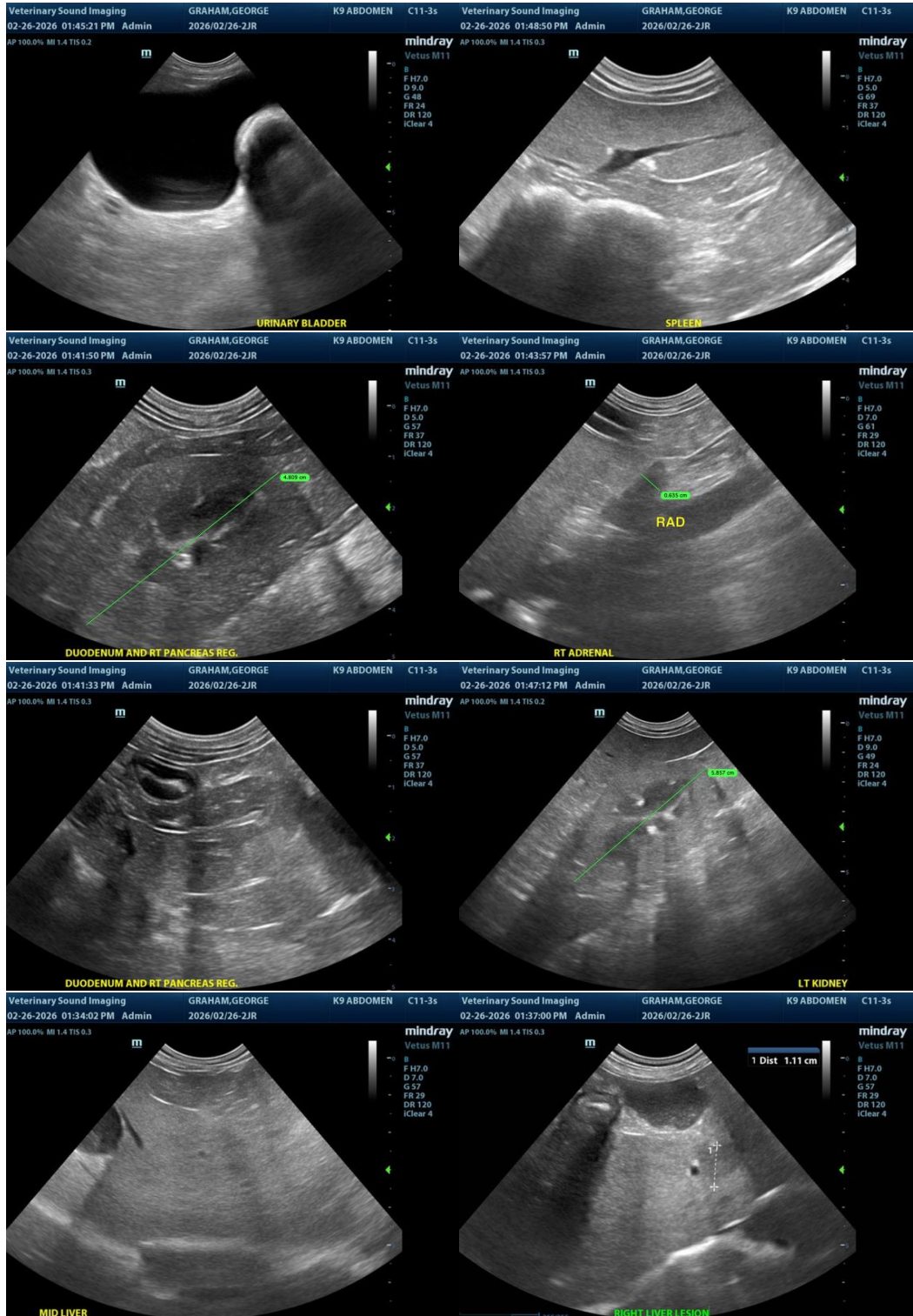
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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info@sonopath.com