



PATIENT PRESENTING CLINICAL SIGNS

Mindy Blue Geer

Presented for possible weight gain per owner - weight stable since previous appointment in April. Owner has also noticed her twitching her hind end when sleeping and randomly yelping out in pain. On PE, Mindy had grade II/IV dental disease, multiple lipoma feeling masses all over her body, and skin above her left eye is alopecic, red, and swollen. Given Convenia injection and sent home with Pred to help with swelling.

SPECIES

Canine

BREED

Shih Tzu

Abnormal PE/Chem/CBC/UA Results: Elevated neutrophils 16.9, glucose 61, chloride 104, globulin 4.2, ALT 227, AST 149, ALP 380, CK 842, blood seen in fee catch urine.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

SEX

FS

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 2 cm exhibited normal thickness and tone. Anechoic urine was present in the lumen with mild dependent mineral. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes were noted.

AGE

12yr

Normal size and margination was 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 to moderate loss of corticomedullary symmetry and definition expected for the age of the patient.

WEIGHT

19.3lb

No evidence of pelvic dilation was present in the left kidney, mild to moderate hydronephrosis was present in the right kidney. Focal small medullary renoliths within the lateral diverticuli of the left kidney and within the medullary and pelvic right kidney were present. Concurrent proximal right ureter calculus was observed measuring 0.7 cm in diameter.

INTERPRETED BY

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

The left kidney measured 4.2 cm in length. The right kidney measured 4.2 cm in length.

The area of the aortic trifurcation was free of pathology.

Adrenal Glands

IMAGING PERFORMED BY

Pamela Harrigan, RDCS

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.49 cm width at the caudal pole and 0.50 cm width at the cranial pole.

A non-expansive well-defined, hyperechoic nodule was present in the mid to cranial right adrenal gland with mild associated symmetrical capsule expansion. The nodule did not exhibit signs of mineralization or vascular invasion. The nodule measured 0.82 cm x 0.66 cm. The right adrenal gland measured 0.75 cm at the cranial pole and 0.43 cm at the caudal pole.

HOSPITAL NAME

Wood River Animal Hospital

Spleen

REFERRING VET

Dr. Plunkett

The spleen exhibited normal size with areas of medial and lateral capsule asymmetry and generalized mild parenchyma heterogeneity including small intraparenchymal nodules.

Liver

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The liver was subjectively mildly enlarged in size with normal structure, and contour. The liver parenchyma was mildly nonuniform and hypoechoic to the spleen with a moderate coarse echotexture and subjective mild to benign parenchymal remodeling. A solitary small intraparenchymal cyst was present containing anechoic fluid. The hepatic and portal vasculature were normal in appearance without signs of congestion.

DATE

08/19/2022



PATIENT

Mindy Blue Geer

The gallbladder was non-distended in size with minor wall edema measuring 0.1 cm in width and moderate non-dependent mildly congealed hyperechoic luminal debris. The cystic and common bile ducts were normal.

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Canine

Gastrointestinal

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach was empty with no signs of ileus, obstruction or foreign material.

BREED

Shih Tzu

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 apparent formed feces in lumen.

SEX

FS

Pancreas

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

AGE

12yr

Free Abdomen

No omental masses, lymphadenopathy or peritoneal effusion was present.

WEIGHT

19.3lb

ULTRASONOGRAPHIC FINDINGS

- Hepatopathy with small intraparenchymal cyst-benign
- Mild cholecystitis pattern with moderate luminal debris-possible early mucocele
- Left kidney chronic renal changes with non-obstructive medullary renolithiasis
- Right kidney mild to moderate hydronephrosis with medullary and pelvic renolithiasis, concurrent proximal right ureter calculus
- Mild non-dependent urinary bladder mineral
- Right adrenal nodule-suspect adenoma

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Secondary

- Benign splenic nodules-consistent with probable myelolipomas

IMAGING PERFORMED BY

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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

HOSPITAL NAME

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Probably partial right ureter obstruction and secondary right kidney hydronephrosis owing to the proximal right ureter calculus. The patient has likely been passing small amounts of mineral from the kidneys into the bladder. Full urinary workup including urine C/S and baseline UPC is recommended.

REFERRING VET

Dr. Plunkett

The appearance of the liver was nonspecific but most consistent with benign hepatopathy. Considerations for the liver may include benign vacuolar hepatopathy, hepatitis/cholangiohepatitis or other. Cholangiohepatitis is suspected. No overt evidence of hepatic neoplasia which is considered a less likely differential diagnosis.

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Ultrasound guided FNA of the liver using a 25-gauge needle and assuming normal coagulation parameters would be warranted for screening cytology, primarily to assess for evidence of inflammatory cells and to rule out unlikely neoplasia. Hepatosupportive medications such as Denamarin or Vitamin E as well as Ursodiol with initial antibiotic therapy which may coincide with urine C/S results would be warranted. Sonographic monitoring of the gallbladder is recommended if evidence of progressive cholestasis or subxiphoid/cranial abdominal pain.

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Sonographic monitoring of the right kidney and proximal right ureter calculus for evidence of



PATIENT

progressive hydronephrosis vs referral for additional therapies could be considered.

Mindy Blue Geer

The right adrenal nodule is non-specific. Concurrent sonographic monitoring of the right adrenal nodule for evidence of progression is suggested. Emerging right adrenal neoplasia cannot be definitively excluded. Screening BP to assess for evidence of hypertension which may allude to a pheochromocytoma is recommended.

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REFERRING VET

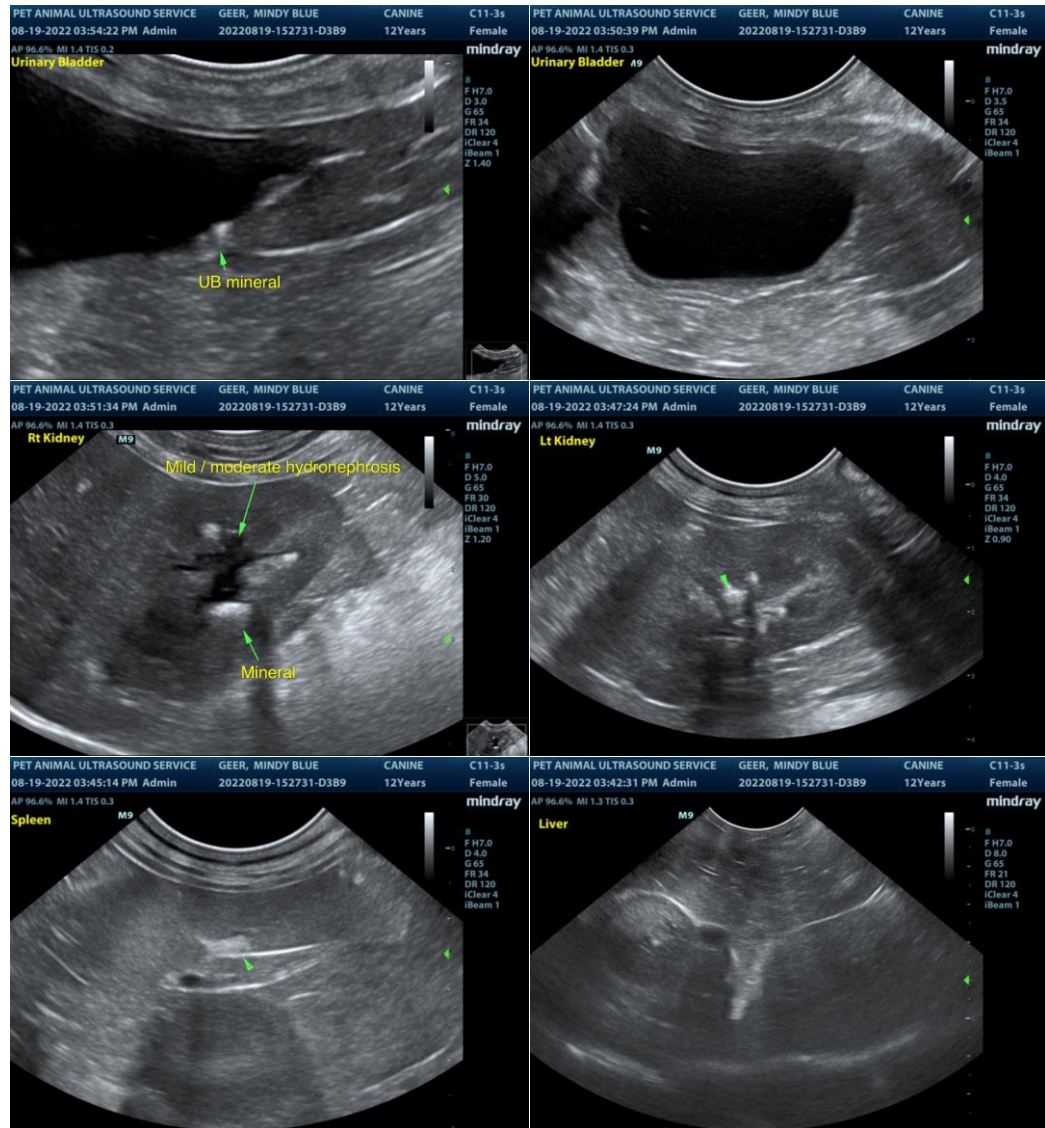
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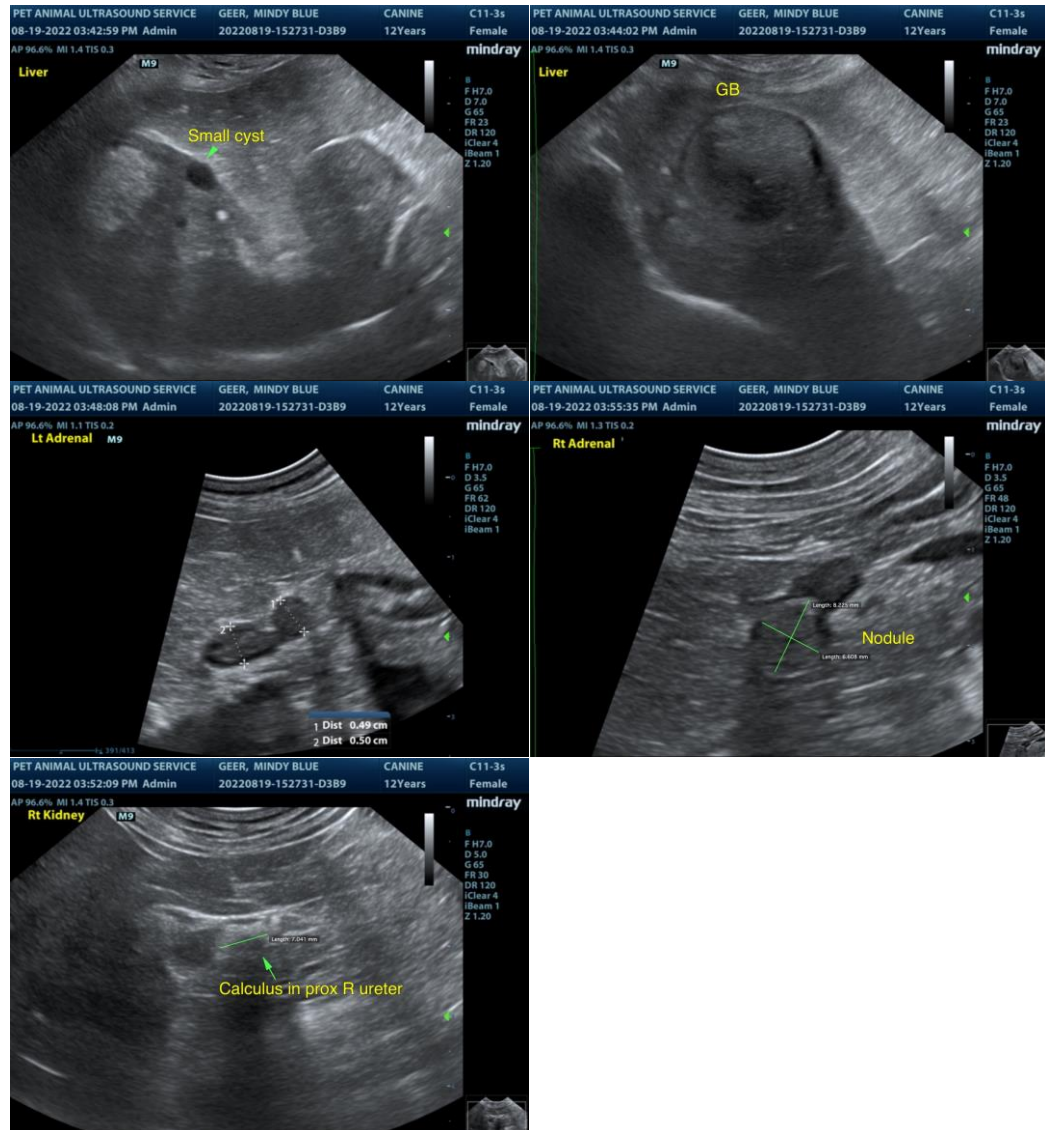
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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