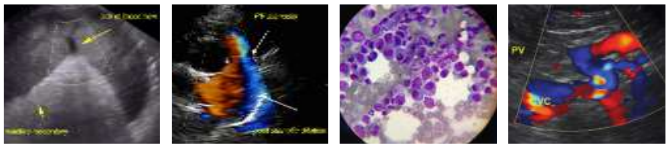
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT
Maggie Butler

SPECIES
Feline

BREED
Korat

SEX
Spayed Female

AGE
13

WEIGHT
8.8

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

IMAGING PERFORMED BY
Dr. Sharkaway

HOSPITAL NAME
Kew Gardens AH

REFERRING VET
Dr. Sharkaway

INVOICE
12157

DATE
9/1/21

PRESENTING CLINICAL SIGNS

-SEVERE AZOTEMIA CREATININE 4.3 ANOREXIA

Abnormal PE/Chem/CBC/UA Results: AZOTEMIA

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 was noted.

The area of the aortic trifurcation was free of pathology.

Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio was maintained in both kidneys with mild loss of corticomedullary demarcation. The echogenicity of the cortex was similar to or slightly less than normal liver parenchyma while the medulla echogenicity was hypoechoic to the cortex. Mild pyelectasia was present in both kidneys. A subtle hyperechoic corticomedullary band, consistent with a medullary rim sign, was present. This is a nonspecific finding seen in both normal and abnormal kidneys. It may be associated interstitial renal disease, hypercalcemia, tubular necrosis, lymphoma, and FIP. However, it is likely an idiopathic finding. The left kidney measured 4.3 cm length. The right kidney measured 4.5 cm in length. Subtle evidence of minor bilateral retroperitoneal inflammation without evidence of retroperitoneal effusion was present.

Adrenal Glands

No overt pathology was noted in the area of the left or right adrenal glands.

Spleen

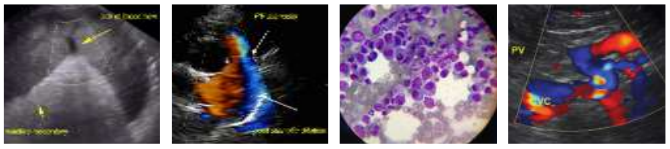
The spleen exhibited a finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. The capsule was smooth and regular without apparent expansion. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis. Acute to chronic inflammatory, neoplastic, or benign parenchyma changes were not noted.

Liver/ Gallbladder

The liver was subjectively normal in size, structure, and contour. The liver parenchyma was uniform and hypoechoic to the spleen with a mild coarse echotexture. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was non-distended in size with thin walls and primarily anechoic luminal content. 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 contained mild, retained, echogenic ingesta / chyme most consistent with post prandial presentation without signs of ileus, obstruction or foreign material. The stomach was otherwise sonographically unremarkable. The gastric body wall width measured 0.27 cm.



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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. The jejunum wall width measured 0.26 cm.

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

Pancreas

The parenchyma of the left limb, body, and right limb of the pancreas presented isoechoic to the adjacent omental fat. A normal curvilinear capsule contour of the pancreas was present. The visible pancreatic duct was normal. No signs of active inflammation or neoplastic disease were evident.

Free Abdomen

No overt lymphadenopathy or peritoneal effusion was present.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Bilateral nephropathy with mild pyelectasia and subtle nonspecific medullary rim sign
- Subjective minor associated retroperitoneal inflammation
- Mild retained gastric ingesta / chyme

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The appearance of the bilateral kidneys was nonspecific yet mostly consistent with chronic nephropathy as opposed to acute kidney injury or insult and in light of the patient's age. However, the potential for an acute insult on top of mild chronic renal changes cannot be definitively excluded. The pyelectasia noted in both kidneys may be owing to mild chronic renal changes, pelvic scarring, IV fluid therapy (if clinically applicable), or the possibility of pyelonephritis cannot be excluded.

Further renal staging to include urine C/S and protein: creatinine ratio on sterile urine sample may be considered. Pending urine culture and sensitivity, essential therapy for chronic kidney disease with as-needed gastroprotectants, and monitoring of systemic blood pressure would be appropriate. Hospitalization with appropriate diuresis protocol with monitoring of urine output and bodyweight to stabilize degree of azotemia and monitoring renal response may be considered.

Subjectively, the kidneys did not appear to be end-stage, although the prognosis is dependent upon response to fluid therapy and CKD treatment.

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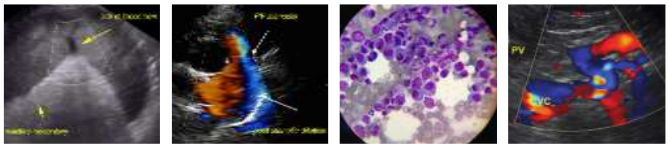

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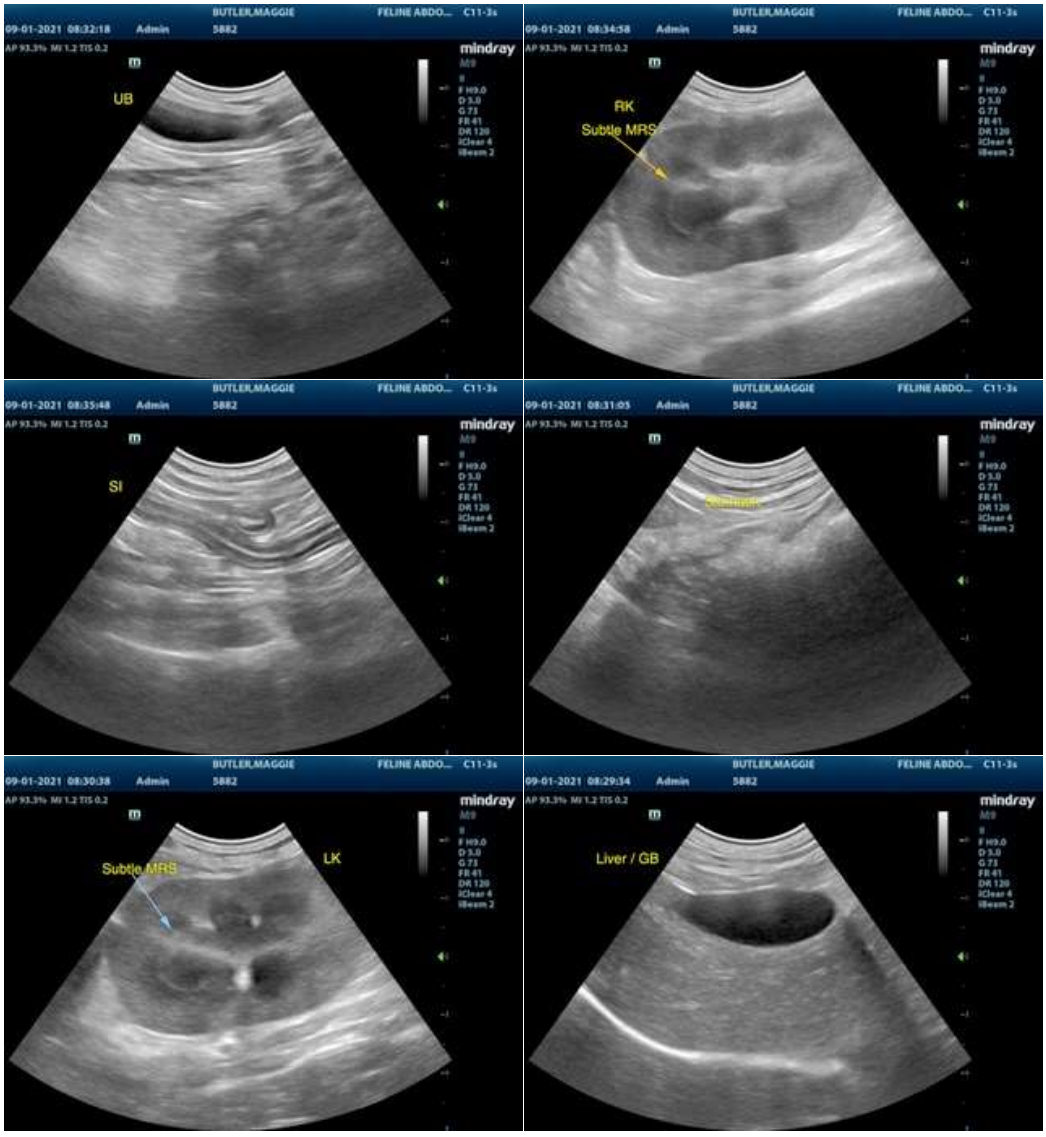

The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)
info@SonoPath.com