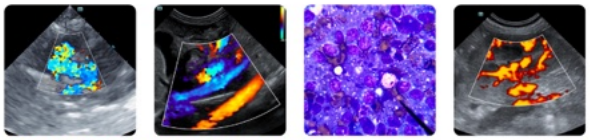


PATIENT

Cowboy Duskin

SPECIES

Feline

BREED

Domestic Medium Hair

SEX

Neutered male

AGE

Mature Adult

WEIGHT

11.7 lbs

INTERPRETED BY

Dr. Alicia Angosto Guerrero

IMAGING PERFORMED BY

Desen Ertunc, DVM

HOSPITAL NAME

Humboldt Veterinary Medical Group

REFERRING VET

Dr. Rice

INVOICE

71516

DATE

2/11/26

PRESENTING CLINICAL SIGNS

Owner adopted from shelter about 7 months ago, told he was 4 years old. A couple months ago, came in for fleas and found to be anemic and had a heart murmur. Also had UTI (rods). Treated with zenequin for 14 days for potential pyelonephritis with UTI, recheck u/a after 3 weeks was normal. Not as playful as he should be, losing a bit of weight. Recheck bloodwork shows worsening anemia (HCT 20%, non-regenerative). Anemia PCR negative

*Abnormal PE: 2/6 heart murmur, weight and muscle loss *Abnormal CBC/Chem/UA/rads (& date obtained): bloodwork done 7/2025: HCT 26% non-regenerative anemia SDMA 12 (0-14), creatinine 2.8 mild hyperglobulenemia 6.8 (3-5.9) recheck bloodwork 1/26/26: u/a normal except usg 1.022 HCT 20% , non-regenerative SDMA 22, creat 2.5 mild hyperglobulinemia 6.7 total bilirubin 0.4 (0-0.3) unconjugated bilirubin 0.3 (0-0.2) Anemia PCR negative

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder lumen is normally distended, and the wall appears thin and smooth. The urine is predominantly anechoic with scant suspended echoes. The bladder neck and proximal urethra appear normal. No calculi are identified, and there is no ultrasonographic evidence of inflammatory or neoplastic changes.

The left kidney measures 2.79×2.47 cm and has an irregular contour. Cortical thickness is difficult to determine accurately due to reduced corticomedullary differentiation; it measures approximately 5.34 mm. The cortex is hyperechoic relative to the liver parenchyma. There is evident pyelectasia, although it could not be measured in the transverse plane. No nephroliths are identified. Color Doppler: not performed.

The right kidney measures 2.80×2.15 cm and has an irregular contour. The cortex is hyperechoic relative to the liver parenchyma and measures 5.12 mm. At least two triangular hyperechoic cortical lesions are identified. Corticomedullary differentiation is better preserved than in the left kidney. Pyelectasia measures 4.11 mm. No nephrolithiasis is identified. Color Doppler: not performed.

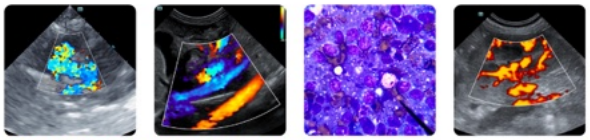
Adrenal Glands

Dorsoventral diameters measured in the sagittal plane are as follows:

The left adrenal gland measures 0.43 cm at the cranial pole and 0.45 cm at the caudal pole. The right adrenal gland measures 0.45 cm at the cranial pole and 0.50 cm at the caudal pole.

Spleen

Splenic thickness measures 1.27 cm, with mildly rounded margins. The parenchyma demonstrates normal echogenicity and fine homogeneous echotexture without focal abnormalities. The splenic capsule is smooth and regular. Splenic vasculature appears normal.



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Liver

The liver is subjectively normal in size, with sharp edges and a regular contour. The parenchyma is uniform and isoechoic relative to the falciform fat, with normal echotexture. No hepatic lymphadenopathy is observed.

The gallbladder lumen is normally distended. The wall is thin, and the contents are primarily anechoic. The common bile duct measures 3.12 mm proximally, 2.03 mm mid-duct, and 1.72 mm distally.

Gastrointestinal

The stomach is empty and folded, with mural thickness measuring 1.31 mm and preserved wall layering. The pylorus measures 2.35 mm with a small amount of luminal fluid.

The duodenum measures 1.33 mm. The jejunum measures 1.43–1.59 mm. The ileum measures 1.31 mm. Wall layering is preserved throughout all evaluated segments. The ileocecal junction was not visualized. No ultrasonographic evidence of inflammation, ileus, obstructive pattern, or intraluminal foreign material is identified.

The colon measures 0.69 mm and contains a small amount of fecal material.

Pancreas

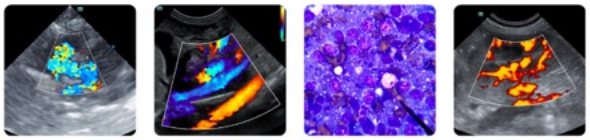
The pancreas measures 5.04 mm in thickness. The parenchyma is isoechoic relative to adjacent omental fat. The pancreatic duct measures 0.83 mm in diameter. The evaluated pancreatic regions do not demonstrate ultrasonographic evidence of overt inflammation.

Peritoneal Cavity

No abdominal effusion or ultrasonographic evidence of peritonitis is observed. Cranial mesenteric and ileocecal lymph nodes are not visualized, and the surrounding regions appear unremarkable. The iliac trifurcation is normal.

ULTRASONOGRAPHIC FINDINGS

- Bilateral irregular renal contours. Cortical hyperechogenicity with reduced corticomedullary differentiation (left > right).
- Bilateral pyelectasia (right 4.11 mm; left subjectively evident).
- Two triangular hyperechoic cortical lesions in the right kidney (likely infarcts/scars).
- Splenomegaly with homogeneous parenchyma.



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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Renal findings are consistent with advanced chronic structural renal disease. While current biochemical parameters are compatible with IRIS stage 2–early 3 chronic kidney disease, the degree of architectural distortion suggests longstanding and progressive renal pathology. The triangular hyperechoic cortical lesions in the right kidney are most compatible with chronic cortical infarcts or fibrotic scars. In the context of advanced chronic structural renal disease, and without ureteral dilation or perirenal inflammatory changes, bilateral pyelectasia is most consistent with altered pelvic drainage secondary to chronic parenchymal fibrosis and architectural remodeling rather than active pyelonephritis.

Given the documented non-regenerative anemia and progressive azotemia, anemia of chronic kidney disease is strongly supported. However, the degree of anemia may be more severe than typically expected in early to moderate CKD alone, and concurrent chronic inflammatory or marrow-suppressive disease cannot be completely excluded.

Splenic thickness and splenic rounding with otherwise homogeneous parenchyma may reflect mild splenomegaly. In the setting of chronic disease and anemia, reactive splenic change and/or extramedullary hematopoiesis are reasonable considerations, although ultrasound cannot confirm this without cytologic correlation.

Both adrenal glands are at the upper end of feline reference ranges. Findings may reflect reactive adrenal hyperplasia in the setting of chronic systemic disease. Clinical correlation is advised at the discretion of the attending veterinarian.

Overall, ultrasonographic findings most strongly support chronic kidney disease with secondary non-regenerative anemia. There is no imaging evidence of abdominal neoplasia or infiltrative disease to directly explain progressive anemia at this time.

Recommendations

- Correlate renal findings with current IRIS staging, including blood pressure measurement and urine protein assessment.
- Given progressive non-regenerative anemia, reticulocyte count and peripheral smear review are recommended to further characterize marrow response. Anemia of chronic kidney disease is likely, but the severity warrants close monitoring and consideration of erythropoietin-stimulating therapy if clinically indicated.
- Serum protein electrophoresis may be considered to further characterize persistent hyperglobulinemia.
- While urine culture may be considered based on clinical judgment, current ultrasonographic findings do not demonstrate features typically associated with active pyelonephritis.

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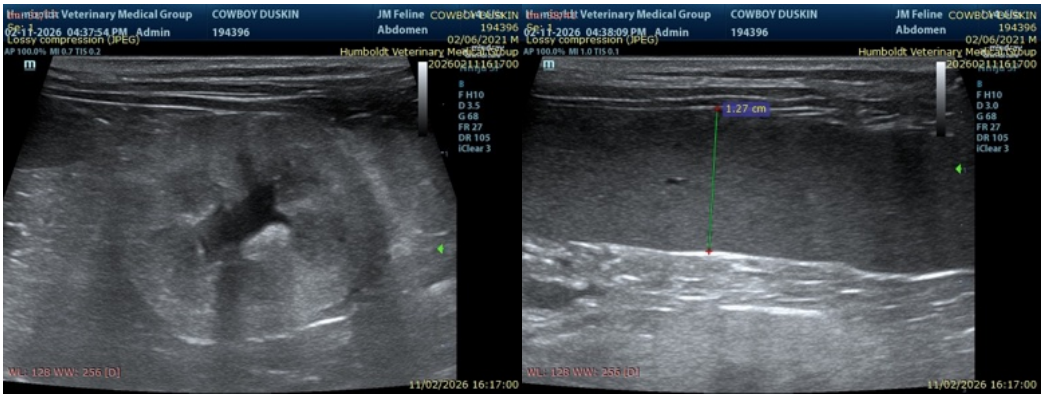

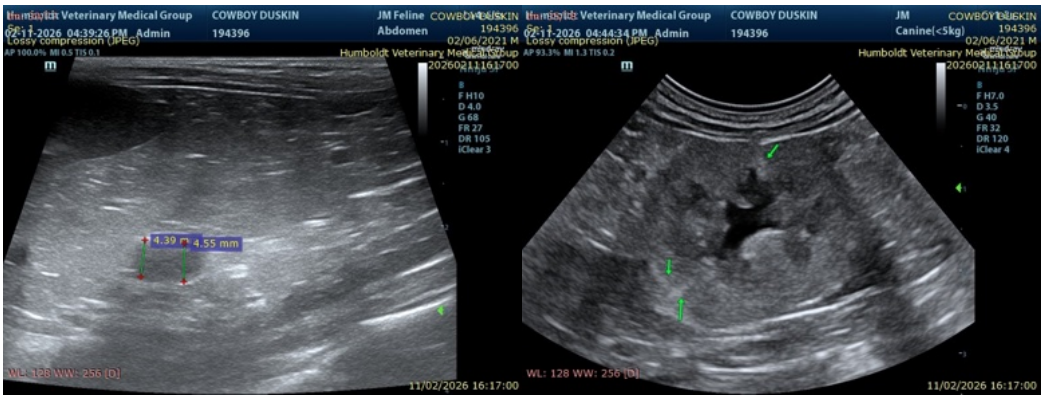

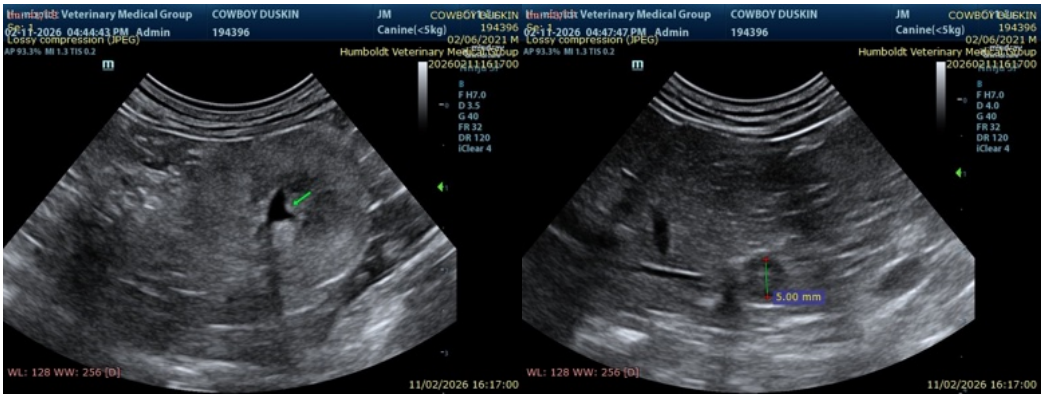

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Alicia Angosto Guerrero, DMV, PgDip, MSc.

MV Esp Ultrasound in Domestic and Wild Animals

info@SonoPath.com

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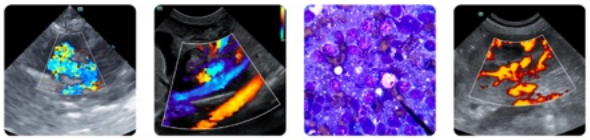

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