



## PATIENT

Murphy Czarniak

## SPECIES

Feline

## BREED

Domestic Shorthair

## SEX

Neutered male

## AGE

10 years

## WEIGHT

16.2 lbs

## INTERPRETED BY

Alicia Angosto  
Guerrero, DMV,  
PgDip, MSc.

## IMAGING PERFORMED BY

Brandi Kurzowski

## HOSPITAL NAME

Corfu VC

## REFERRING VET

Dr. Greil

## INVOICE

74239

## DATE

4/7/26

## PRESENTING CLINICAL SIGNS

- P presented today for lethargy and inappetence for 1 week
- Significant weight loss since Feb 2026 (4.7 lb)
- Foul odor from mouth, drooling ++
- Elevated kidney values-being hospitalized for supportive care
- CBC- RBC 6.39 M/uL, MCV 53.7 fl, MCH 17.7 pg, retic-hgb 23.3 pg, WBC 23.85 k/uL, Neut 21.17 k/uL, Mono 0.71 k/uL, PLT 746 k/uL Chem- Crea 21.8 mg/dL, BUN >260mg/dL, Phos 25.6 mg/dL, Glu 180 mg/dL, TP 11g/dL, glob 7.8 g/dL, AMYL 1586 U/L UA- USG 1.016, Trace protien, pH 5

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### Urinary System

The urinary bladder is adequately distended. The bladder wall is thin, smooth, and regular. The luminal contents are anechoic. The bladder neck and proximal urethra have a normal appearance. No evidence of urolithiasis or inflammatory or proliferative changes is identified.

The left kidney is normal in shape and size, measuring 3.79×3.03 cm in the sagittal plane. Cortical thickness is 0.67 cm. The right kidney is normal in shape and size, measuring 3.90×2.67 cm in the sagittal plane. Cortical thickness is 0.61 cm. In both kidneys, the cortex is hyperechoic compared to the hepatic parenchyma. The cortical thickness is increased so corticomedullary ratio is reduced, although corticomedullary definition remains preserved. There is no evidence of pyelectasia, nephrolithiasis, or hydronephrosis. Color Doppler demonstrates a normal vascular pattern.

### Adrenal Glands

Both adrenal glands show normal shape and echogenicity. Dorsoventral diameters measured in the sagittal plane: The left adrenal gland measures 0.28 cm at the cranial pole and 0.29 cm at the caudal pole. The right adrenal gland measures 0.27 cm at the cranial pole and 0.29 cm at the caudal pole.

### Spleen

Splenic thickness is 0.94 cm. The parenchyma demonstrates normal echogenicity and a fine, homogeneous echotexture with a few small hyperechoic foci consistent with myelolipomas. The splenic capsule is smooth and regular.

### Liver

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

The gallbladder lumen is normally distended. The wall is thin and the contents are primarily anechoic with a very small amount of biliary sludge. No evident dilation of the cystic duct or common bile duct is observed.



## PATIENT

Murphy Czarniak

## SPECIES

Feline

## BREED

Domestic Shorthair

## SEX

Neutered male

## AGE

10 years

## WEIGHT

16.2 lbs

## INTERPRETED BY

Alicia Angosto  
Guerrero, DMV,  
PgDip, MSc.

## IMAGING PERFORMED BY

Brandi Kurzowski

## HOSPITAL NAME

Corfu VC

## REFERRING VET

Dr. Greil

## INVOICE

74239

## DATE

4/7/26

## *Gastrointestinal*

The stomach is empty and folded, with a wall thickness of 1.39 mm and preserved layering. Duodenum: 1.87 mm. Jejunum: 1.86–2.17 mm, with mucosa 0.87 mm, submucosa 0.61 mm, and muscularis propria 0.49 mm. Ileum: 1.17 mm, with mucosa 0.23 mm, submucosa 0.70 mm, and muscularis propria 0.18 mm. Wall layering is preserved. The ileocecal junction is not visualized. No evidence of ileus, obstruction, or inflammatory change is identified.

Colon measures 0.94 mm, containing formed fecal material.

## *Pancreas*

The evaluated pancreatic areas do not show evidence of overt inflammation or neoplastic disease.

## *Free Abdomen*

No sonographic evidence of abdominal effusion, peritonitis, or lymphadenomegaly is identified. The iliac trifurcation appears normal.

## PRIMARY FINDINGS

- Bilateral renal cortical hyperechogenicity.
- Abnormal corticomedullary ratio with cortical thickness.

## SECONDARY FINDINGS

- Mild splenic myelolipomas (incidental).

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The kidneys demonstrate diffuse cortical thickening and increased cortical echogenicity, resulting in a somewhat rounded (globular) renal contour, while corticomedullary definition remains preserved. Renal size remains within expected limits for a cat (approximately 3.8–3.9 cm), although cortical thickness (0.61–0.67 cm) is increased compared to typical feline reference values (approximately 0.2–0.4 cm).

These ultrasonographic findings, when interpreted in the context of the reported clinical and laboratory abnormalities are highly supportive of severe diffuse renal parenchymal disease.

Ultrasonography does not allow reliable differentiation between acute and chronic renal disease; however, the preservation of renal size and architecture, combined with cortical thickening rather than cortical thinning, raises concern for a significant acute component, potentially superimposed on pre-existing subclinical disease.

Based on the imaging findings and clinical context, the most relevant differential diagnoses include:

- Inflammatory renal disease
  - Interstitial nephritis (infectious or immune-mediated).



**PATIENT**

Murphy Czarniak

**SPECIES**

Feline

**BREED**

Domestic Shorthair

**SEX**

Neutered male

**AGE**

10 years

**WEIGHT**

16.2 lbs

**INTERPRETED BY**

Alicia Angosto  
Guerrero, DMV,  
PgDip, MSc.

**IMAGING  
PERFORMED BY**

Brandi Kurzowski

**HOSPITAL NAME**

Corfu VC

**REFERRING VET**

Dr. Greil

**INVOICE**

74239

**DATE**

4/7/26

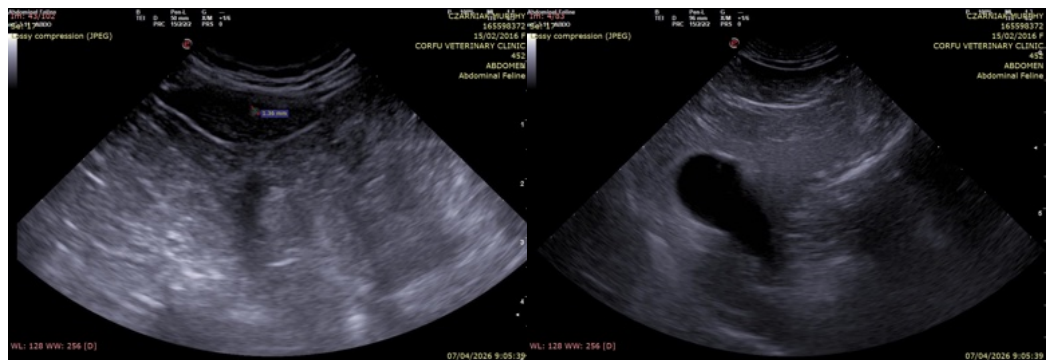
- Acute kidney injury:
  - Toxic (nephrotoxic agents, drugs, plants).
  - Ischemic injury (hypoperfusion, shock).
  - Infectious causes.
- Acute-on-chronic kidney disease: A common scenario in cats, where an acute insult precipitates decompensation of previously compensated renal disease.
- Glomerular disease (glomerulonephritis or glomerulopathy)
  - Considered given the marked hyperglobulinemia, although the absence of significant proteinuria on urinalysis reduces specificity.

Overall, the ultrasonographic findings are most consistent with severe diffuse renal disease, likely with a significant acute component, although chronic underlying pathology cannot be excluded.

**Recommendations**

- Immediate and aggressive supportive care is indicated, including continued intravenous fluid therapy and close monitoring of hydration status, urine output, and electrolyte balance.
- Serial monitoring of renal parameters is strongly recommended to assess response to therapy and help differentiate reversible (acute) versus chronic disease components.
- Urinalysis with sediment examination and urine culture is recommended to evaluate for infectious or inflammatory renal disease, particularly given the inflammatory leukogram.
- Blood pressure measurement is advised, as systemic hypertension may be present and contribute to renal injury.
- UPC (urine protein:creatinine ratio) may be considered once the patient is stabilized, to further assess for glomerular disease.
- If clinically indicated, infectious disease testing (FeLV/FIV, and regionally relevant pathogens) may be considered as potential contributors to renal or systemic disease.

Final diagnostic and therapeutic decisions should be made by the attending veterinarian, who can best integrate these findings with the patient's clinical status.





## PATIENT

Murphy Czarniak

## SPECIES

Feline

## BREED

Domestic Shorthair

## SEX

Neutered male

## AGE

10 years

## WEIGHT

16.2 lbs

## INTERPRETED BY

Alicia Angosto  
Guerrero, DMV,  
PgDip, MSc.

## IMAGING PERFORMED BY

Brandi Kurzowski

## HOSPITAL NAME

Corfu VC

## REFERRING VET

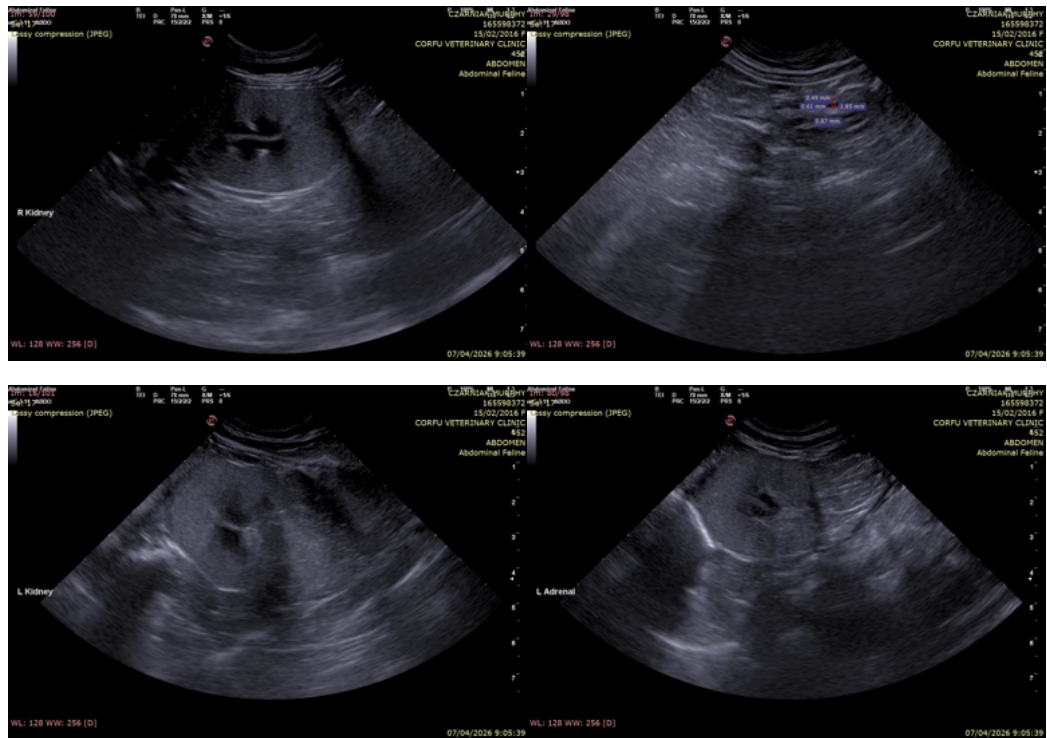
Dr. Greil

## INVOICE

74239

## DATE

4/7/26



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.

[info@SonoPath.com](mailto:info@SonoPath.com)