



## PATIENT

Oreo Austin

## SPECIES

Feline

## BREED

DMH

## SEX

MN

## AGE

6yr

## WEIGHT

16.5lb

## INTERPRETED BY

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

## IMAGING PERFORMED BY

Lucan Budden

## HOSPITAL NAME

Frontier Veterinary  
Hospital

## REFERRING VET

Lucas Budden

## INVOICE

23420

## DATE

01/04/2026

## PRESENTING CLINICAL SIGNS

Clinical signs: Elevated creat with urine that is not concentrated, concern for CKD History: History of FIC. Currently eating a Royal Canin Satiety + Hydrolyzed diet. Drinks more than other cats in the house, but owners do not feel like it is excessive. Doing well otherwise at home. Ultrasound to assess urinary tract for signs of CKD or other contributing factors to elevated kidney value with dilute urine. Current medications: Royal Canin Satiety + Hydrolyzed Butorphanol to facilitate ultrasound Proviavle, Zylkene

Abnormal PE/Chem/CBC/UA Results: Physical exam: BCS 8/9, bladder comfortable on palpation, mild dental tartar, normal exam otherwise Lab work: Chem: Albumin 4.1 (H) Creat 1.6 CPK 1571 (H) CBC: normal T4: 2.4 (normal) FeLV/FIV/HWA: neg x3 Fecal: pending sample UA: USG 1.010, pH 7.5, quiet sediment Renal Tech: positive

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### Urinary System

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 3 cm exhibited normal thickness and tone. Anechoic urine was present in the lumen with mild non-dependent particulate sediment. The ureteral papillae were normal. The ureters were not visible, which is normal. No evidence of inflammatory or neoplastic changes was noted.

Normal size and minor asymmetrical margination were present in the kidneys. A normal 1:3 cortex / medulla ratio was present with mildly enhanced to increased cortex echogenicity and corticomedullary border demarcation. No evidence of right kidney pyelectasia. Minor left kidney pyelectasia was present. The left kidney measured 4.1 cm in length. The right kidney measured 4.6 cm in length.

The area of the aortic trifurcation was free of pathology.

### Adrenal Glands

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.28 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 0.32 cm width at the caudal pole.

### 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. The spleen measured 0.78 cm in width at the level of the mid spleen.

### 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. Normal vascular volume. 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.



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## Gastrointestinal

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach contained mild non-shadowing ingesta, sonographically suggestive of food echogenicity and lumen gas with no signs of obstruction 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 mechanical/metabolic ileus, obstruction or foreign material.

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 was evident.

## Free Abdomen

No omental masses or peritoneal effusion was present.

Intermittent minor prominent to enlarged colic and focal jejunocolic lymph nodes adjacent to the left pancreatic limb were present. The lymph nodes were essentially isoechoic to adjacent omentum without evidence of peripheral inflammation and maintaining a normal width: length ratio (<0.5). An example measured 0.65 cm in diameter.

## ULTRASONOGRAPHIC FINDINGS

### Primary

- Mild urine sediment
- Normal bilateral renal size with mild hyperechoic cortex, minor left kidney pyelectasia
- Intermittent mild to jejunocolic lymphadenopathy - subjective benign

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

No evidence of significant renal pathology i.e. dysplasia, neoplasia, significant renal changes. The increased bilateral renal cortex echogenicity is non-specific and may indicate increased cortical fat deposition given patient body size while potential for non-specific nephritis or emerging left kidney pyelonephritis cannot be excluded. A urine C/S on sterile urine sample if inflammatory sediment or UPC if non-inflammatory proteinuria for renal staging is suggested. Renal support with monitoring of renal parameters and UA going forward is suggested. Recheck sonogram indicated if progressive azotemia or UA abnormalities.



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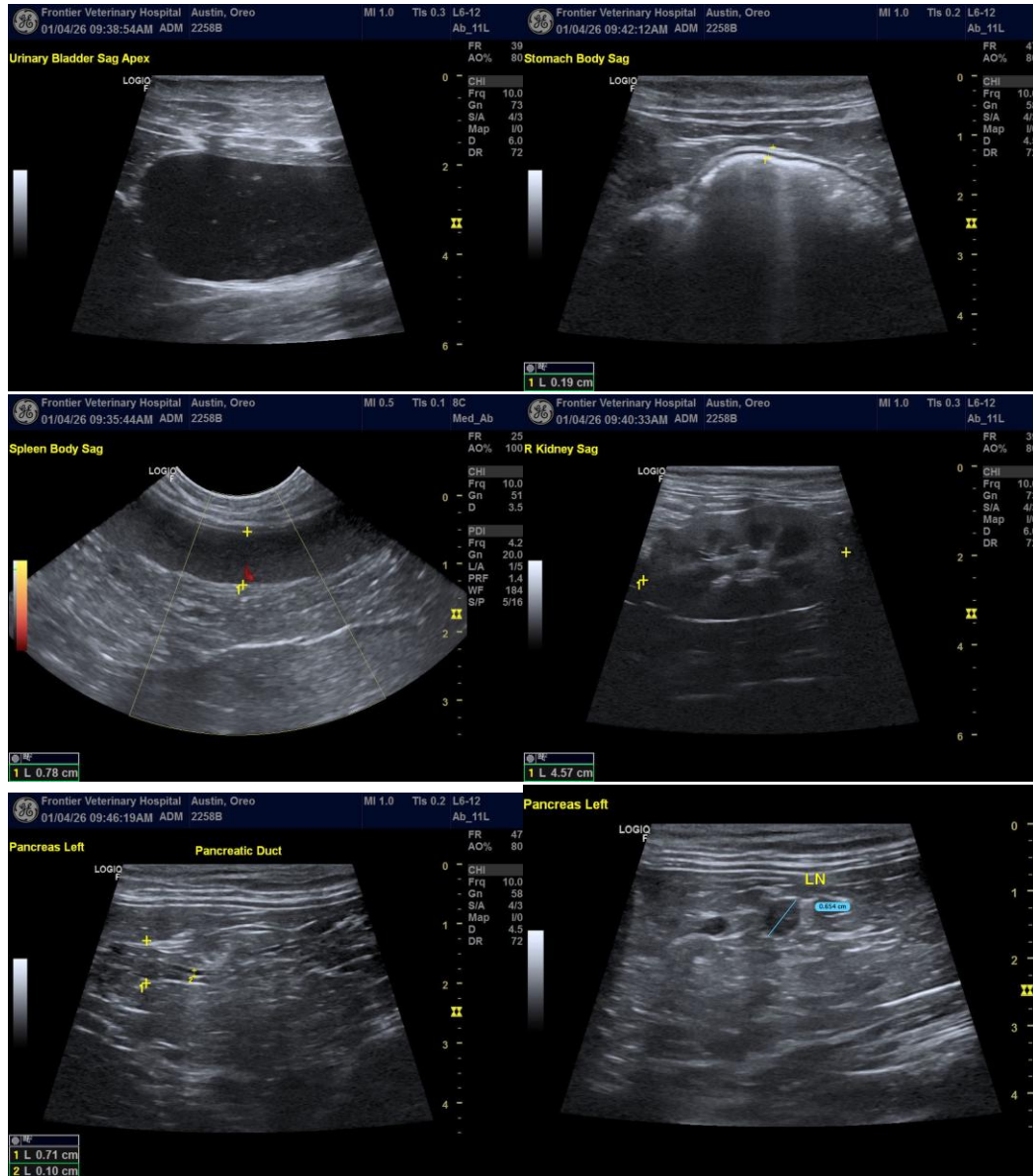
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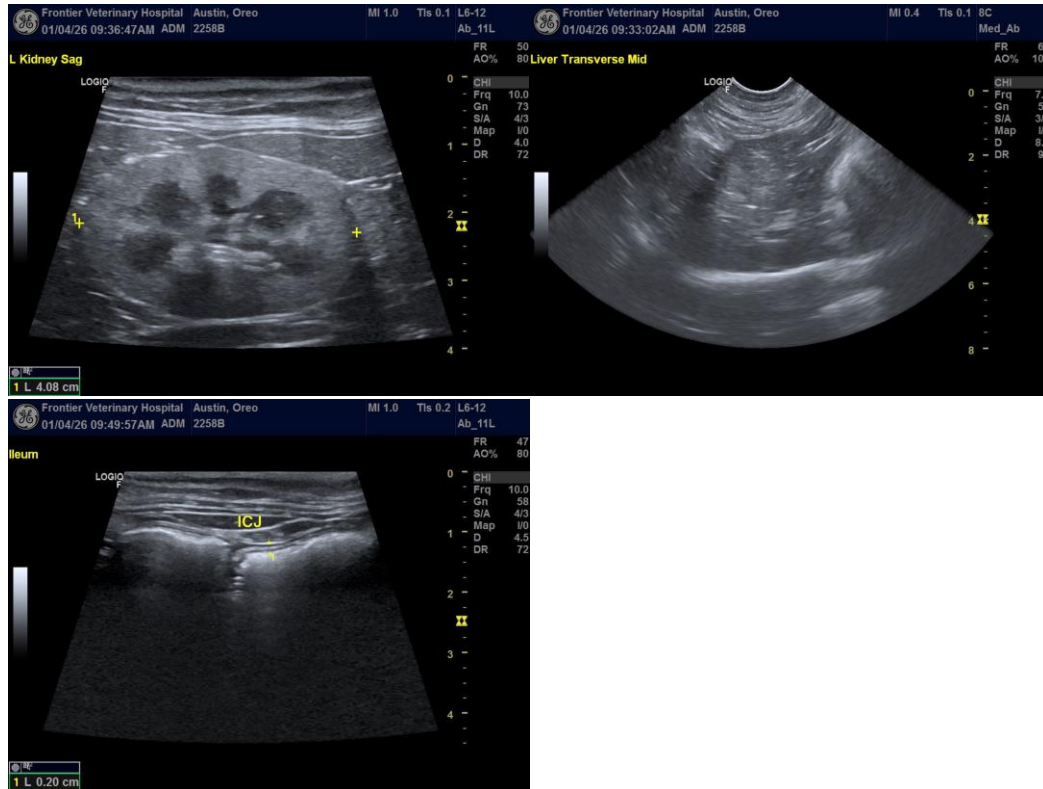
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

R. McKenzie Daniel, DVM, DABVP (Canine/Feline Practice)  
[info@sonopath.com](mailto:info@sonopath.com)