



## PATIENT

Edgar Frankenhauser

## SPECIES

Canine

## BREED

Terrier Mix

## SEX

MN

## AGE

12 years 10 months

## WEIGHT

17.58 lbs

## INTERPRETED BY

Tam Mengine, DVM,  
DABVP (canine/feline  
practice)

## IMAGING PERFORMED BY

Dr. Lucas Budden

## HOSPITAL NAME

Frontier Veterinary  
Hospital

## REFERRING VET

Dr. Lucas Budden

## INVOICE

11798

## DATE

4/24/2026

## PRESENTING CLINICAL SIGNS

Chronic ALP elevation. Hematuria on free catch UA. Ultrasound to assess liver and urinary system for causes.

Current medications: Trazodone, butorphanol, Dexdomitor to facilitate ultrasound  
Galliprant, Tri-Cox, Denamarin, Adequan.

Abnormal PE/Chem/CBC/UA Results: Physical exam: BCS 8/9, slightly distended abdomen, normal exam otherwise Lab work: 11/17/25 senior panel ALP high 358 Albumin high 4.5 PrecisionPSL high 880 Remainder cbc/chem normal T4 normal urine collected via free catch USG 1.031 trace prot 4-10 RBC Accuplex all negative Fecal negative.

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### Urinary System

The urinary bladder is moderately distended with anechoic urine, and no luminal sediment is present. The ureteral papillae, trigone and pelvic urethra are of normal appearance, and the ureters are not visible (normal). No masses, calculi or mucosal irregularities are noted. Urethra visible to 3.0 cm.

The prostate is of appropriate size for patient age and neutering status, with a homogenous parenchyma and smooth capsule. The prostatic urethra is non-dilated with normal margins.

The kidneys are of normal size and shape and exhibit appropriate corticomedullary differentiation with a normal 1:3 cortex to medulla ratio. There is no evidence of nephrolithiasis, mineralization, pyelectasia, cystic change or hydronephrosis. The proximal ureter is not visible (normal). Left kidney measures 4.5 cm, and the right kidney measures 4.7 cm.

### Adrenal Glands

The adrenal glands are both identified in their normal locations. They are normal in size and shape with appropriate parenchymal echogenicity and normal phrenic vasculature. Left adrenal measures 6.0 mm at the cranial pole and 5.4 mm at the caudal pole. The right adrenal measures 6.8 mm at the cranial pole and 6.1 mm at the caudal pole.

### Spleen

There is a hyperechoic mass within the splenic parenchyma, with no visible deviation of the splenic capsule. The splenic vasculature is normal with no evidence of congestion or thrombosis, and blood flow through the splenic hilus appears normal.

### Liver

The liver is of appropriate size and shape, with sharp borders and a mildly coarse parenchymal echotexture that is hypoechoic to the spleen. The parenchyma is subjectively mildly hyperechoic, with reduced portal markings. The portal and hepatic vasculature are of normal size and appearance with no evidence of congestion or thrombosis.

The gallbladder is moderately distended with anechoic contents and a small amount of freely-moveable echogenic sludge. The wall was thin and continuous with small focal polypoid lesions. The cystic and common bile ducts are normal / not visible.



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## Gastrointestinal

The stomach is empty. The gastric wall is normal deviations due to rugal folds, and exhibits appropriate wall layering. The pylorus is of normal appearance.

The visualized portions of the duodenum (4.6 mm), jejunum (3.9 mm), and ileum are of normal thickness with intact wall layering that exhibits the appropriate 1:3 muscularis to mucosa ratio. Intestinal motility appears normal.

The visible portions of the colon are of normal thickness, 1.5 mm, with intact wall layering. The ileocecal junction is visualized and appears normal.

## Pancreas

The body of the pancreas is hyperechoic to the surrounding mesenteric fat, with an inhomogenous parenchyma and normal capsular appearance. There is no evidence of peripancreatic inflammation. The pancreatic duct appears normal.

## Free Abdomen

There is no evidence of free fluid within the peritoneal cavity. The omentum and intra-abdominal fat are of appropriate echogenicity. Enlarged abdominal lymph nodes are not observed. The aortic trifurcation has normal blood flow with no evidence of thrombosis.

## PRIMARY FINDINGS

- Mildly hyperechoic liver, consistent with non-specific reactive hepatopathy.

## SECONDARY FINDINGS

- Mildly heterogeneous pancreas without evidence of inflammation.
- Hyperechoic splenic nodule consistent with incidental myelolipoma.
- Gallbladder wall polypoid hyperplasia, which is an incidental finding in the older dog.

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The appearance of the liver and elevated ALP are consistent with a reactive hepatopathy. The following next steps are recommended:

- Screening for hyperlipidemia with a fasted triglyceride level is recommended, if not already performed.
- Testing for Cushing's disease is recommended only if clinical signs support the diagnosis, otherwise a false positive result may be obtained. The appearance of the adrenal glands does not support a diagnosis of Cushing's disease, but this does not completely rule it out.
- Serial chemistry screens, at 3-6 month intervals, are recommended. As long as all other liver laboratory values are normal, then a clinically significant hepatopathy is highly unlikely. However, if ALT or TBili become elevated, then bile acid testing, liver support supplements such as SAME, milk thistle and ursodiol, as well as recheck ultrasound would all be recommended.



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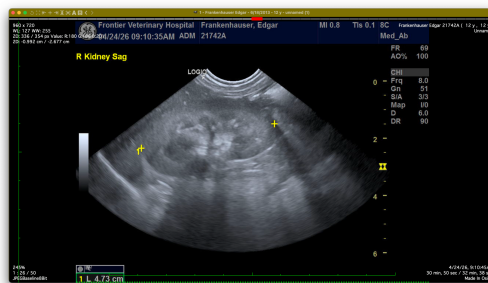
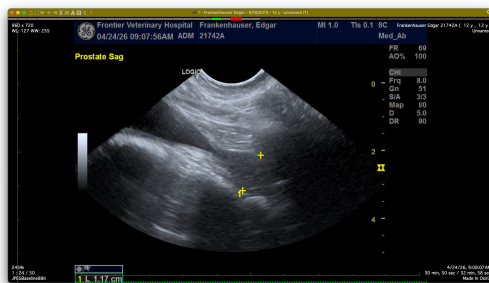
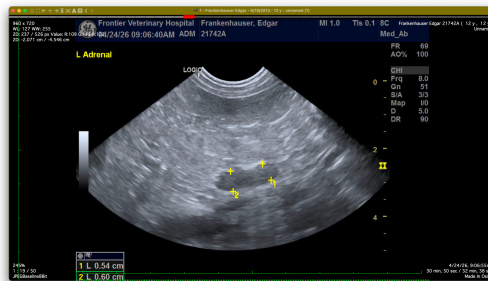
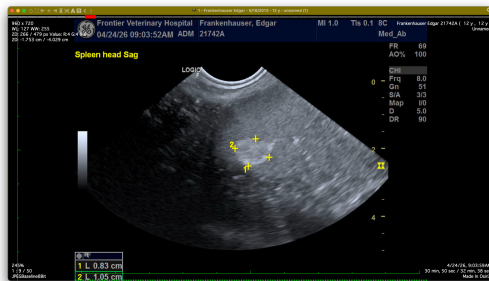
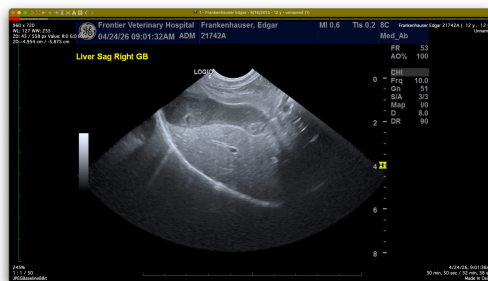
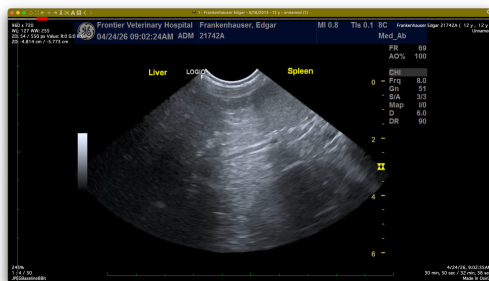
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- Ultrasound-guided or laparoscopic biopsies would be needed for definitive diagnosis. Fine needle aspirate for cytology could also be performed but is less likely to yield a definitive diagnosis.

There is no apparent explanation for the patient's hematuria. Urine culture should be considered, particularly if this symptom is persistent. Cystoscopy would be necessary to rule out the possibility of a lesion in the distal urethra.

The appearance of the pancreas is consistent with chronic remodeling change, which may indicate chronic pancreatitis, but which can also be incidental. This finding should be correlated with the presence or absence of any clinical symptoms referable to pancreatitis.





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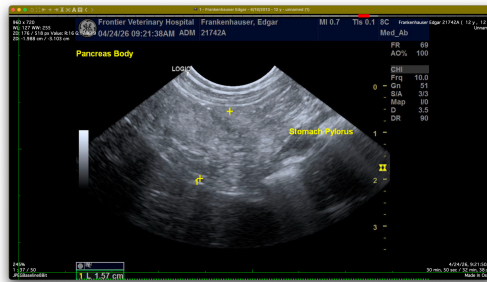
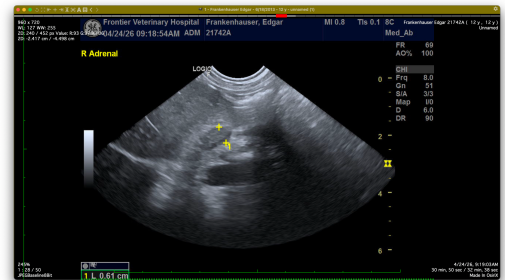
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

**Tam Mengine, DVM, DABVP (canine/feline practice)**

info@SonoPath.com