



**PATIENT**

Murphy Goodwin

**SPECIES**

Canine

**BREED**

Irish Setter

**SEX**

Neutered male

**AGE**

6 ½ years

**WEIGHT**

71.8 lbs

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUS

**IMAGING PERFORMED BY**

Heather McNemar

**HOSPITAL NAME**

Animal Care Center of  
Flanders

**REFERRING VET**

Dr. Hallihan

**INVOICE**

46694

**DATE**

8/21/23

**PRESENTING CLINICAL SIGNS**

History: chronic hematuria, mild hypokalemia, BUN slightly elevated, new positive anaplasma positive infection, platelets normal Gave 100mg traz this morning then gave 0.65 torb IV and 0.07 Ace IV

BUN - 34(hi), Potassium - 3.8(lo), Na:k Ratio - 38(hi) Specific grav - 1.032 clarity of u/a - cloudy, 6.5PH, urine protein- 3+, WBC - 0-2, RBC - 2-5, epithelial cells(rare) - 0-1

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

The **urinary bladder**, trigone, and pelvic urethra presented normal thicknesses and normal tone. The ureters were not visible which is normal. No uroliths or sediment were visualized and anechoic urine was present. No evidence of inflammatory or neoplastic changes was noted. Ureteral papillae were normal.

The **kidneys** presented a relatively uniform cortical hyperechogenicity when compared to the renal medulla, spleen and liver. No overt masses were noted. Corticomedullary definition was nebulous and the ratio favored the cortex slightly. The ureters were not visible and assumed to be normal. These changes are most consistent with chronic interstitial nephritis yet infiltrative disease could not be entirely ruled out without biopsy though neoplasia is not suspected. The right kidney measured 6.6 cm.

**Adrenal Glands**

Both **adrenal glands** were visualized and recognized as having normal shape, size, position and echogenicity for this breed. The phrenic vasculature, glandular echogenicity and detail were unremarkable. Capsule, cortex, and medullary definition were normal for this age patient. The left adrenal gland measured 0.5 cm. The right adrenal gland measured 0.5 cm.

**Spleen**

The **spleen** presented a smooth homogeneous parenchyma hyperechoic to liver and renal cortical parenchyma. The capsule was smooth without noticeable expansion or deviation from within the spleen or adjacent pathology. The splenic vasculature demonstrated normal volume without signs of congestion or thrombosis. No sonographic evidence of acute or chronic inflammatory, neoplastic, or infarctual changes was noted.

**Liver**

The **liver** images submitted revealed subjectively normal liver size, contour, and structure. Parenchymal echogenicity was naturally coarse and hypoechoic to the spleen. Vascular and biliary tracts were of normal volume with no evidence of congestion. The gallbladder presented acceptably thin walls with primarily anechoic content. The cystic and common bile ducts were normal. No pathological hepatic lymphadenopathy was evident. No overt structural evidence of inflammatory, infiltrative or regenerative pathology was evident.



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## Gastrointestinal

Examination of the **gastrointestinal tract** revealed a stomach and intestine free of stasis, of normal wall thickness, acceptable curvilinear mural detail, and peristaltic activity. Small and large intestine demonstrated normal luminal chyme and stool consistency respectively. No obstructive or overt infiltrative disease was noted. No associated abnormal lymphatic activity was noted.

## Pancreas

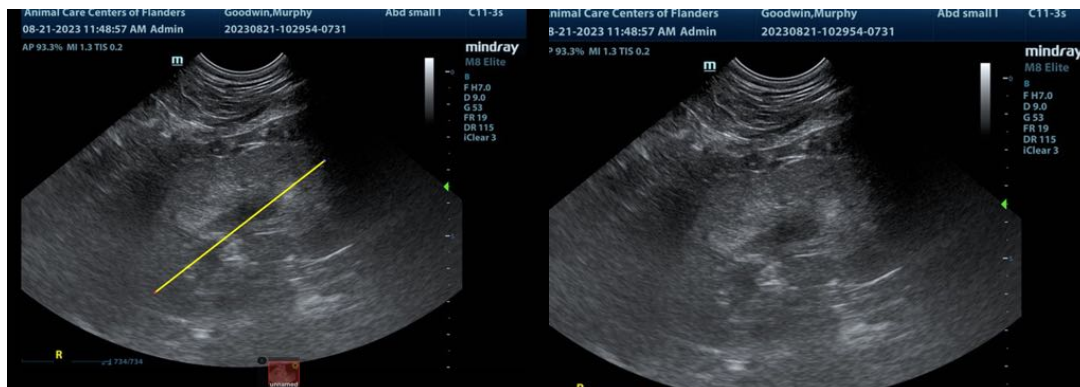
The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Pancreatic duct and capsular contour were acceptably normal and parenchyma respected normal curvilinear patterns. No overt evidence of active inflammatory or neoplastic disease was noted.

## ULTRASONOGRAPHIC FINDINGS

Structurally unremarkable abdomen with mild interstitial nephrosis renal pattern.

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The cause of hematuria is unclear. Urinary tract infection, recent passage of calculi (although no obstructive disease was present at the time of the sonogram), underlying coagulopathy and idiopathic hematuria are all possible. Doxycycline trial may be appropriate in his patient.



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.

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