



**PATIENT PRESENTING CLINICAL SIGNS**

River Rackliff

History: Elevated renal values noted on pre-anesthetic BW for neuter 1 year ago. No clinical signs of kidney disease reported by owner. Active, muscular dog. Sedated with Butorphanol IV.  
Abnormal PE/Chem/CBC/UA Results: BW (4/25/22): BUN 99, Creat 5.0, Phos 8.2. BW (12/20/22): BUN 95, Creat 4.1, Phos 7.1. Brief AUS at time of neuter 1 year ago: fairly normal looking kidneys.

**SPECIES**

Canine

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**BREED**

**Urinary System**

French Bulldog

The **urinary bladder**, trigone, and pelvic urethra presented normal thicknesses and normal tone. The pelvic urethra was imaged 3.0 cm beyond the cystourethral junction. 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.

**SEX**

Male

The prostate was uniform and measured 1.0 cm.

**AGE**

1 year 11 months

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. Subcapsular halo was noted along with disrupted architecture. The left kidney measured 4.45 cm. The right kidney measured 5.21 cm. Blood flow was significantly subnormal in both kidneys on Power Doppler assessment.

**WEIGHT**

30 lbs

**INTERPRETED BY**

**Adrenal Glands**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

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 0.58 cm at the caudal pole and 0.57 cm at the cranial pole. The right adrenal gland measured 1.61 cm at the cranial pole and 0.65 cm at the caudal pole.

**IMAGING PERFORMED BY**

Dr. Ebersole

**Spleen**

**HOSPITAL NAME**

Scanvet

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.

**REFERRING VET**

Dr. Perkins

**INVOICE**

**Liver**

30339

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.

**DATE**

5/12/22



**PATIENT**

**Gastrointestinal**

River Rackliff

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.

**SPECIES**

Canine

**BREED**

French Bulldog

**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.

**SEX**

Male

**ULTRASONOGRAPHIC FINDINGS**

**AGE**

1 year 11 months

Primary renal dysplasia pattern with the possibility of toxin or infectious exposure such as Leptospirosis. However, the primary architecture is significantly disrupted.

End stage degenerative renal changes.

**WEIGHT**

30 lbs

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

A renal biopsy is necessary for further definition. However, the prognosis long term is poor.

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Dr. Ebersole

**HOSPITAL NAME**

Scanvet

**REFERRING VET**

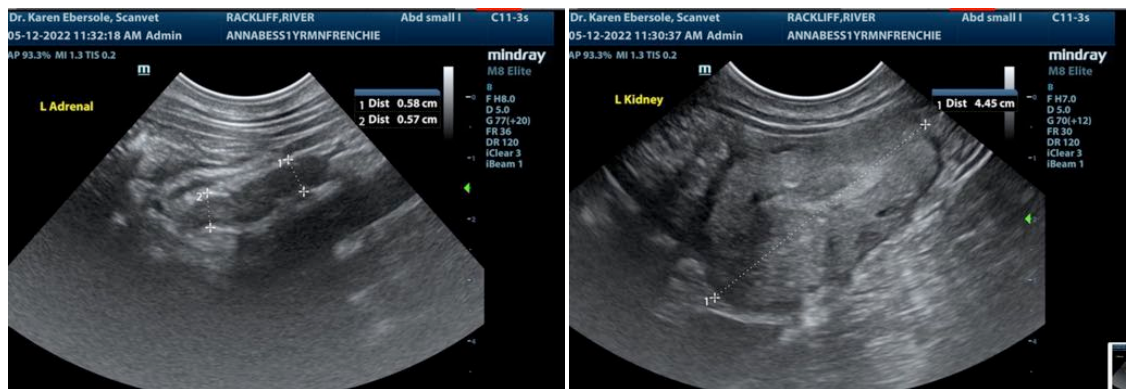
Dr. Perkins

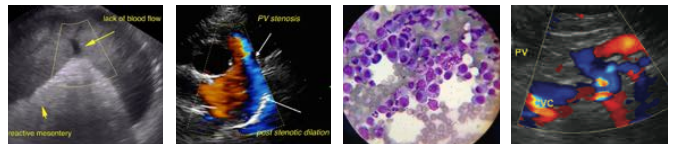
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**DATE**

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**PATIENT**

River Rackliff

**SPECIES**

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1 year 11 months

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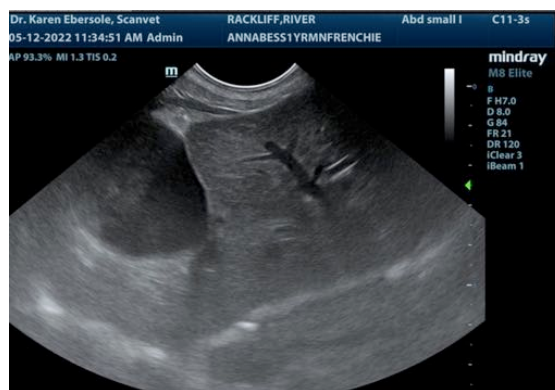
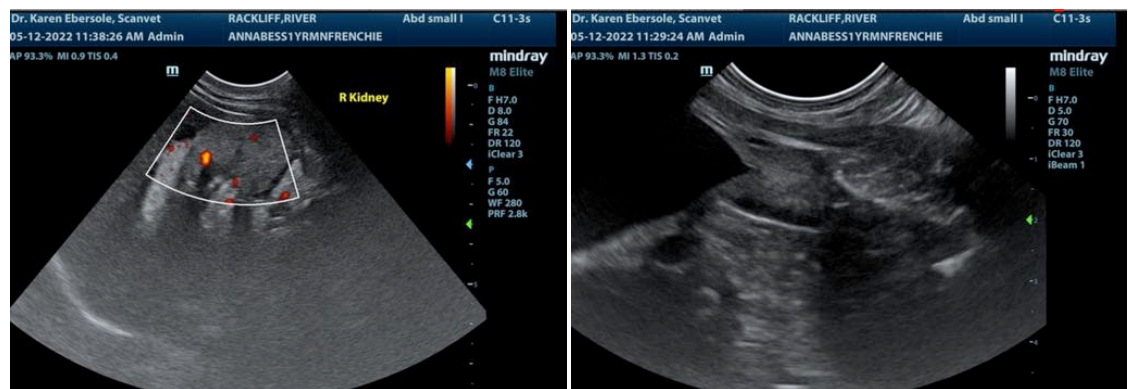
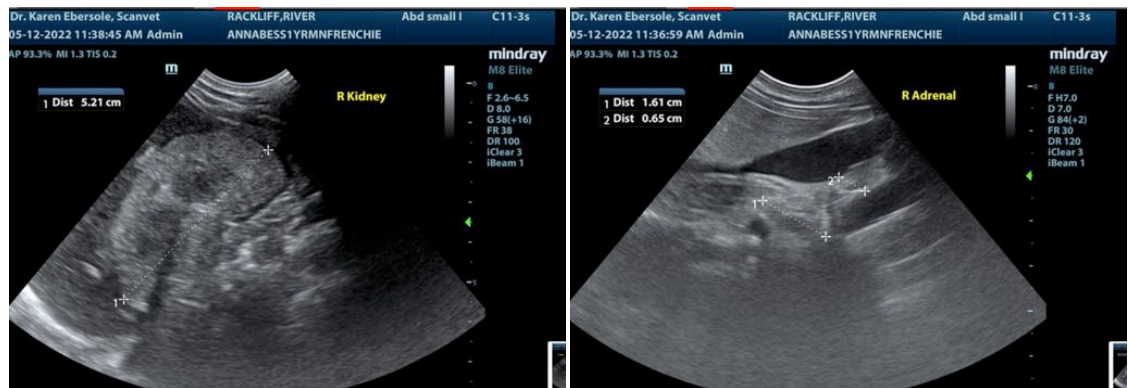
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**DATE**

5/12/22



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.



**PATIENT**

**Eric Lindquist, DMV, DABVP, Cert. IVUSS, CEO of SonoPath.com**  
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