

**DATE**

1/12/22

PRESENTING CLINICAL SIGNS

History: Patient's renal values have been elevated - surgical specialist requesting ultrasound prior to spay surgery.

Lab Results: Attached separately.

PATIENT

Lucy Wise

Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

Sedation: Dexdomitor/Torbugesic.

Stat Report: Not requested.

Imaging Performed By: Stephane Pearce RDCS, RVT.

SPECIES

Canine

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.

BREED

Golden Retriever

SEX

Intact female

The right ovary was uniform and measured 1.86 x 0.5 cm. The left ovary measured 1.67 x 0.5 cm.

AGE

7/23/20

The **right kidney** revealed loss of corticomedullary definition with thickened cortices and pyelectasia. Pyelectasia measured 0.93 cm. Cortical striations were noted. The right kidney measured 8.43 cm. The left kidney is significantly subnormal in size and measured 3.23 cm. The left kidney revealed complete lack of corticomedullary structure. Disrupted pelvic architecture was also noted in the left kidney. Both kidneys revealed multi focal infarcts and degenerative changes. Blood flow was subnormal on color flow assessment.

WEIGHT

62 lbs

Adrenal Glands

The right adrenal gland was flattened, yet technically within normal limits and measured 2.89 x 0.54 cm at the caudal pole and 0.36 cm at the cranial pole. The left adrenal gland measured 3.04 x 0.46 cm at the caudal pole and 0.52 cm at the cranial pole.

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

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.

HOSPITAL NAME

Maryland Mobile VC

REFERRING VET

Dr. Powel

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.

INVOICE

95202

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. The mesenteric lymph nodes were reactive measuring 2.85 cm. This is consistent with a juvenile patient.

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

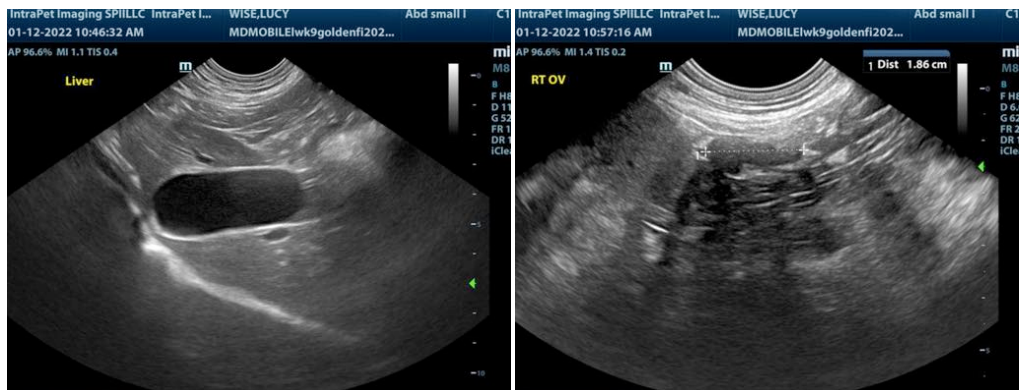
Severe left renal dysplasia. Primary congenital defect is suspected.
Moderate dysplastic right kidney with compensatory hypertrophy.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

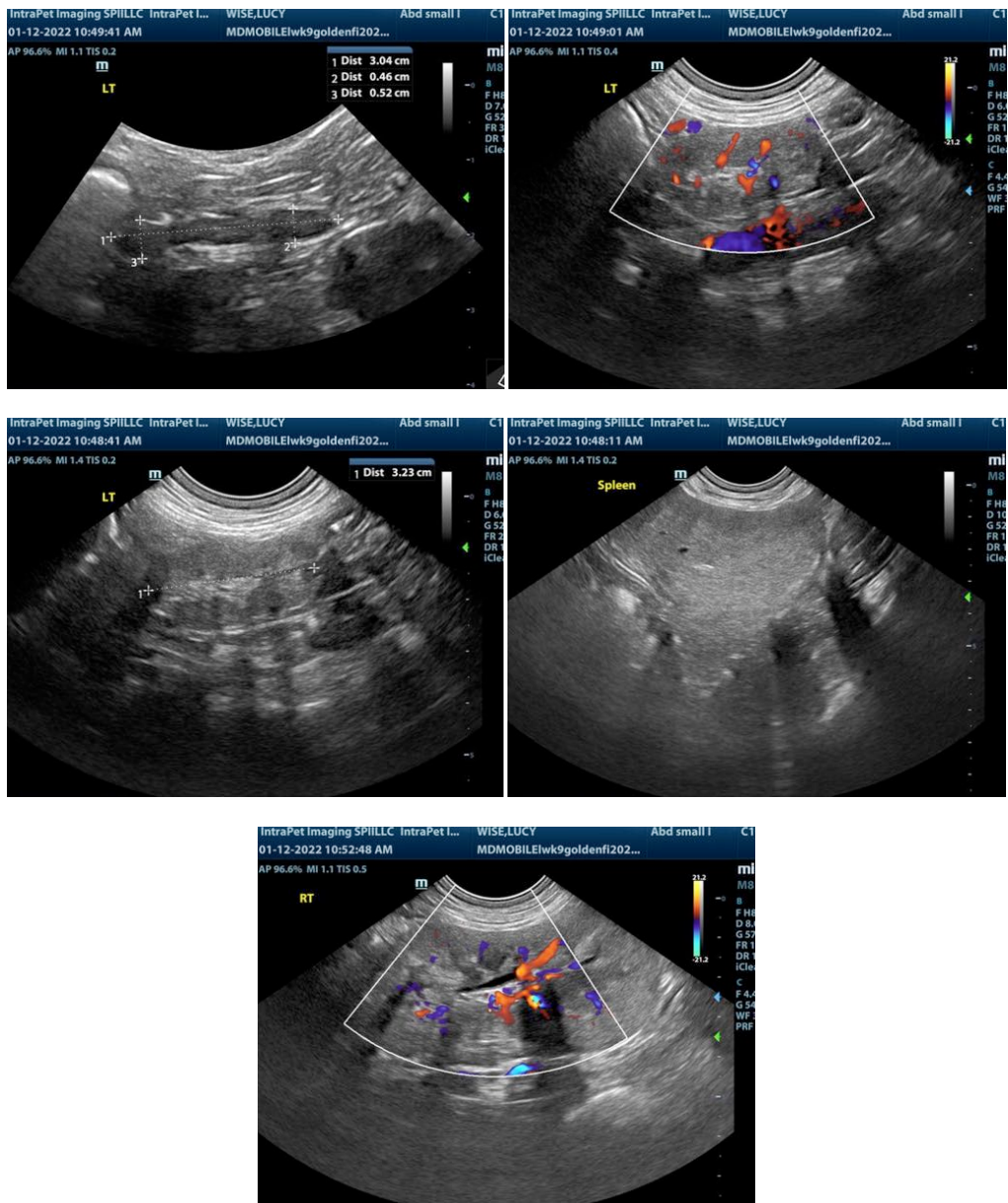
This is likely a primary renal dysplasia case with secondary degenerative changes and pyelonephritis. Renal biopsy would be necessary for further definition. However, the prognosis is extremely guarded to poor long term. Urine culture and sensitivity, blood pressure measurements, 72-hour IV fluid protocol and reassessment of the azotemia and evidence of UTI is recommended. 4-6 week antibiotic therapy is warranted. The breeding line should be evaluated for similar dysplastic changes in the kidneys especially if renal biopsy confirms suspected renal dysplasia. Ideally both kidneys would be biopsied. Technically if the azotemia is able to be stabilized and ovariohysterectomy is performed a renal biopsy can be performed at that time. However, the prognosis long term is guarded to poor given the disrupted renal structure.

Canine Chronic UTI Protocol

I recommend **Enrofloxacin** (5-10 mg/kg SID PO) (In patients > 1 year of age) in late pm after urination to maximize urinary concentrations overnight. This assumes that culture supports this use. Repeat **culture** at 3-4 weeks and continue treatment at least 7-10 days post negative urinary sediment and negative culture. *Note: Negative culture does not necessarily mean lack of UTI.* Other favorite antibiotics for chronic UTI include third generation Cefa (Ceftiafur or similar s.i.d. injectable) or Clavamox. If suspicion of occult urinary incontinence is present then **phenylpropanolamine (PPA)** (1-2 mg/kg BID) can be employed long term to enhance urethral tone.







The information and recommendations provided are based on the images presented by the referring veterinarian. 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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