



**PATIENT PRESENTING CLINICAL SIGNS**

**PATIENT** Julie Hughes  
**SPECIES** Feline  
**BREED** Domestic Shorthair  
**SEX** Spayed Female  
**AGE** 16 years  
**WEIGHT** 11.8 lbs

**History:** Diabetic, managed on Semglee insulin 2U BID. Presented on 5/11/22 for acute onset vomiting, diarrhea and hyporexia. Responded well to SQ fluids, Cerenia, metronidazole and Mirataz. Had a similar episode in February. Screening for underlying co-morbidity (ie. pancreatitis or other).  
**Abnormal PE/Chem/CBC/UA Results:** BW (5/11/22): BUN 41 H, Glucose 546. UA (cysto): hematuria and glucosuria. No WBC or bacteria. BG today still in 500's.

**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** revealed normal size and structure, corticomedullary definition and ratio for this age. The cortices presented largely uniform texture with normal echogenic relationship to liver and spleen. Medullary structure differed distinctly from the cortex. The capsules were acceptably uniform without significant irregularities. The left kidney measured 4.71 cm with 0.7 cm of pyelectasia with echogenic debris. The right kidney measured 4.36 cm with slight pyelectasia. Minor pericapsular inflammatory pattern was noted around both kidneys.

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**Adrenal Glands**

Both **adrenal glands** were mineralized. The right adrenal gland was normal in size and contour measuring 0.4 cm. The left adrenal gland was enlarged, hypoechoic, and irregular with capsular expansion without capsular escape. The left adrenal gland was egg shaped and measured 1.0 x 1.7 cm. There was no evidence of obvious vascular invasion.

**IMAGING PERFORMED BY**

Dr. Ebersole

**HOSPITAL NAME**

Scanvet

**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.

**REFERRING VET**

Dr. McMullin

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**Liver**

The **liver** images from right and left intercostal as well as subcostal views revealed subjectively normal liver size, contour, and structure. Some age-related parenchymal remodeling was noted but likely not clinically significant at this time. Vascular and biliary tracts were of normal volume and no evidence of congestion was noted. The gallbladder presented some dependent debris with essentially normal contour. The cystic and common bile ducts were normal. No overt evidence of active inflammatory,

**DATE**

5/17/22



<b>PATIENT</b>	infiltrative or regenerative pathology was noted but should be paired with current or past LE elevations regarding any clinical significance to this presentation. The hepatic lymph nodes were unremarkable.
Julie Hughes	
<b>SPECIES</b>	<b>Gastrointestinal</b>
Feline	Examination of the <b>gastrointestinal tract</b> 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.
<b>BREED</b>	
Domestic Shorthair	
<b>SEX</b>	<b>Pancreas</b>
Spayed Female	The <b>pancreas</b> was enlarged, irregular and heterogenous. This is consistent with hyperplasia and some level of pancreatitis.
<b>AGE</b>	<b>ULTRASONOGRAPHIC FINDINGS</b>
16 years	Enlarged, irregular left adrenal gland. Concern for carcinoma.
<b>WEIGHT</b>	Chronic renal changes with pyelectasia. Possible UTI.
11.8 lbs	
<b>INTERPRETED BY</b>	<b>INTERPRETATION OF THE FINDINGS &amp; FURTHER RECOMMENDATIONS</b>
Eric Lindquist, DMV DABVP, Cert. IVUSS	The left adrenal gland appears resectable. Assessment of UTI is warranted. Sodium potassium ratio should be evaluated and if altered then aldosterone level would be indicated. Blood pressure measurements are indicated. Eventual left adrenalectomy is recommend subxiphoid palpation is warranted to assess for any pancreatic discomfort that would suggest inflammation.
<b>IMAGING PERFORMED BY</b>	<b>Potential Causes of Diabetic Dysregulation</b>
Dr. Ebersole	This is a suggestive checkoff list when faced with an unregulated diabetic patient:
<b>HOSPITAL NAME</b>	UTI
Scanvet	Dietary indiscretion/intolerance
<b>REFERRING VET</b>	Pancreatitis
Dr. McMullin	Hyperthyroidism/hypothyroidism
<b>INVOICE</b>	Exogenous steroids (including topical eye meds)
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	Acromegaly
<b>DATE</b>	Owner compliance
5/17/22	Insulin quality issues



**PATIENT**

Antibodies to insulin

Julie Hughes

Underlying Neoplasia

Diffuse liver disease

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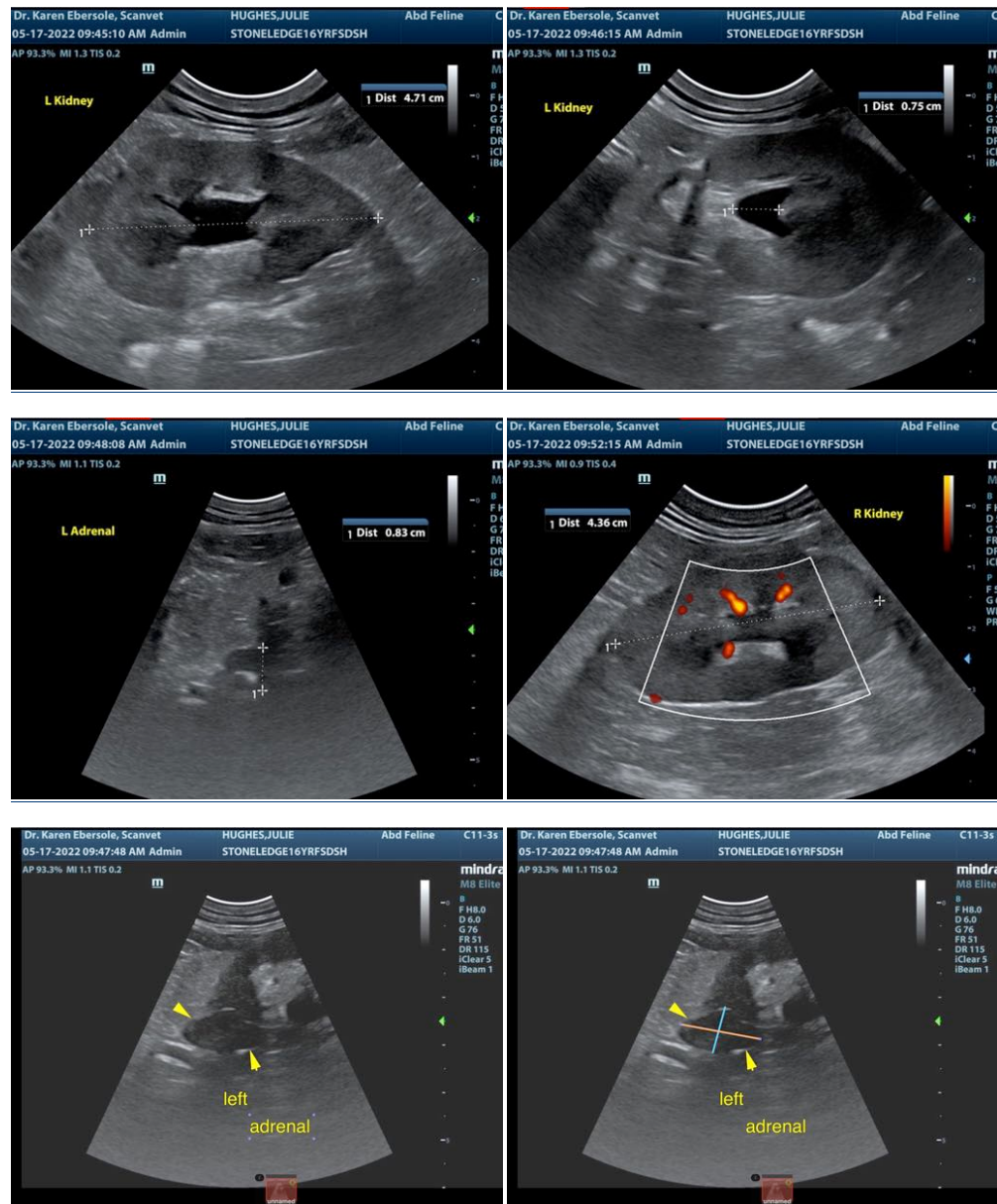
Dr. McMullin

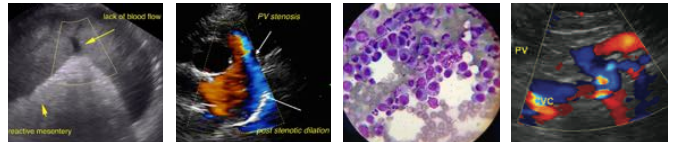
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Julie Hughes

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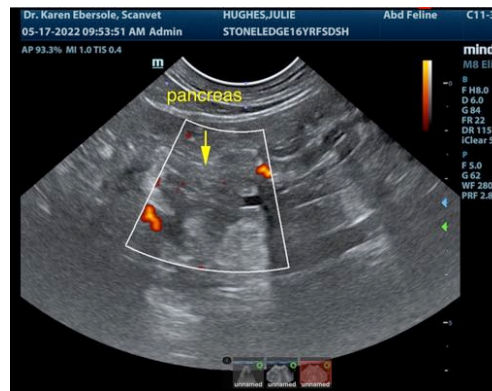
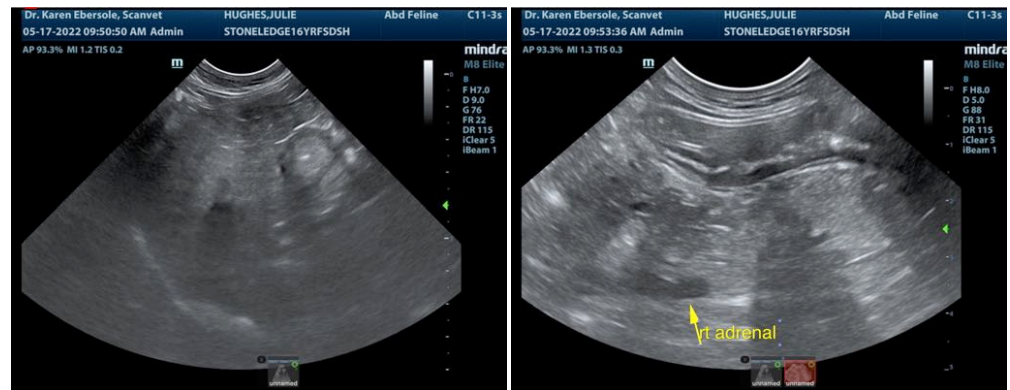
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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