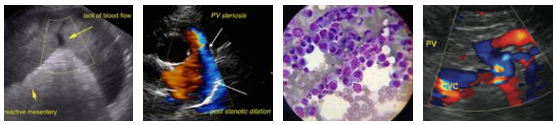




**PATIENT**
Autzen Elroy

**SPECIES**
Canine

**BREED**
Terrier Cross

**SEX**
Neutered male

**AGE**
8 years

**WEIGHT**
27 lbs

**INTERPRETED BY**
**Eric Lindquist**, DMV, DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**
Jenna Walsh, CVT

**HOSPITAL NAME**
West Salem AC

**REFERRING VET**
Dr. Sirianni

**DATE**
11/16/21

**Invoice**
93148

## PRESENTING CLINICAL SIGNS

History: 1. Diabetes mellitus - receiving 12 U vetsulin q 12 hrs 2. Vomiting, decreased appetite, dehydrated 3. Stumbling, wobbly, running into things Vomiting r/o: pancreatitis, liver disease, other Abnormal PE/Chem/CBC/UA Results: Elevated ALP, ALT, GGT and total bilirubin r/o hepatitis vs neoplasia vs toxin vs Cushing's vs open Elevated liver values r/o: infection, CAH, neoplasia, other

## 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** were normal in size and contour; however, a minor hyperechoic ring was noted at the corticomedullary junction. This is consistent with diabetic nephropathy. This is likely from glucosuria. However, assessment for proteinuria is also warranted. This is an idiopathic finding, but an expected finding in diabetic patients. The right kidney measured 5.23 cm.

### *Adrenal Glands*

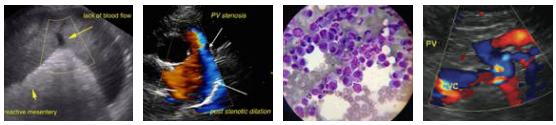
Both **adrenal glands** were visualized and recognized as having normal shape, size, position and echogenicity for this breed. The phrenic vasculature, glandular echogenicity and detail were unremarkable. Capsule, cortex, and medullary definition were normal for this age patient. The left adrenal gland was slightly swollen at the caudal pole and measured 0.67 cm, 0.48 cm at the cranial pole and 2.26 cm in length. The right adrenal gland measured 2.02 x 0.48 cm at the cranial pole and 0.59 cm at the caudal pole.

### *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 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,





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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.

### *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. There was some hyperperistalsis noted in the small intestine, yet was structurally unremarkable.

### *Pancreas*

The **pancreas** was coarse in architecture with a hypoechoic parenchyma. There is a potential for low-grade inflammation, yet the changes are minor. The left pancreatic limb measured 1.5 cm.

## ULTRASONOGRAPHIC FINDINGS

Prominent pancreas, likely low-grade pancreatitis.

Diabetic nephropathy.

Mild chronic inflammatory hepatic changes were noted.

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Given the elevated liver values FNA is warranted. There is no evidence of neoplasia. Leptospirosis titers are warranted.

**Potential Causes of Diabetic Dysregulation**

This is a suggestive checkoff list when faced with an unregulated diabetic patient:

UTI

Dietary indiscretion/intolerance

Pancreatitis

Hyperthyroidism/hypothyroidism

Exogenous steroids (including topical eye meds)

Cushing's

Acromegaly

Owner compliance

Insulin quality issues

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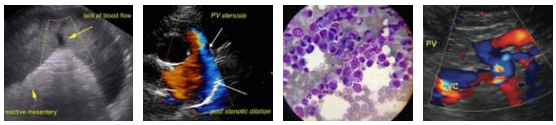

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AnimalSoundsNW.com 541-357-9423

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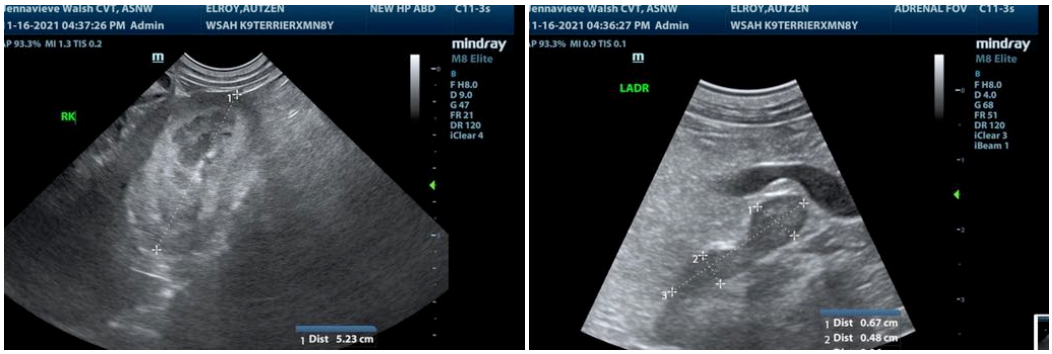
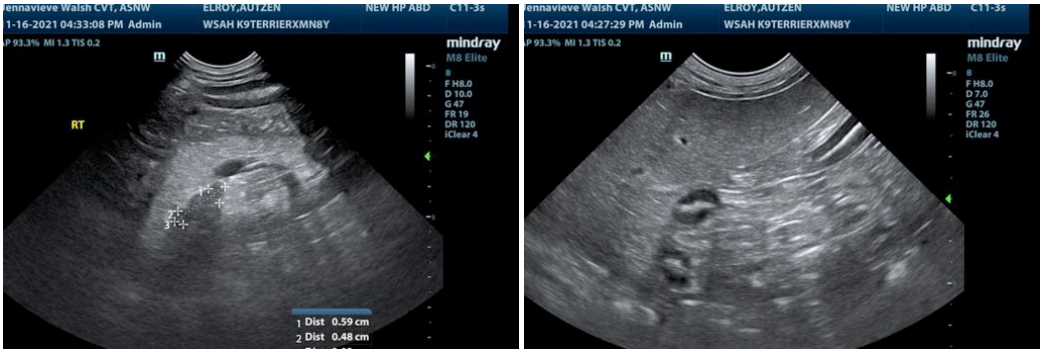
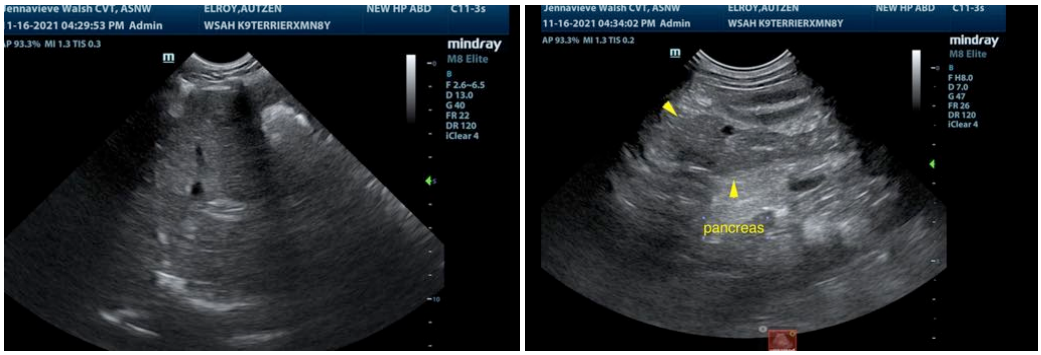
Antibodies to insulin

Underlying Neoplasia

Diffuse liver disease




**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.

**Eric Lindquist**, DMV, DABVP, Cert. IVUSS

CEO of Sonopath.com

Eric.Lindquist@SonoPath.com