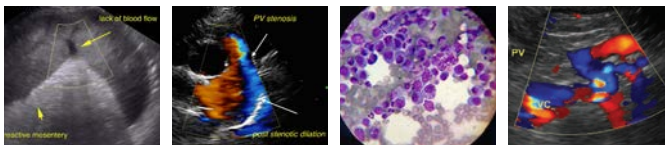
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT
Oakley Botto

SPECIES
Canine

BREED
Shiba Inu X

SEX
Neutered Male

AGE
8.5 Years

WEIGHT
84.1 Pounds

INTERPRETED BY
Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY
Kelly Vazquez

HOSPITAL NAME
Westwood Regional

REFERRING VET
Dr. Hartwick

INVOICE
46015

DATE
3/17/23

PRESENTING CLINICAL SIGNS

Patient with history of difficulty regulating diabetes and early diabetic hepatopathy 9/27/19 and 8/17/2021, presents again for difficulty regulating diabetes. Had been on 30 units of NPH - switched to Vetsulin - no curve - staying high for 24 hours in the 400's on 25 units. Did Freestyle Libre - not somogyi. Current meds: Cranadin, Claratin, insulin - right now, RC Glycobalance.

Abnormal PE/Chem/CBC/UA Results: ALT 142, Alk. Phos. 179. CBC: WNL, T4 2.4. U/A: 3+ glucose, (-) ketones, USG 1.055.

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 were 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. Similar to prior sonogram. The left kidney measured 8.0 cm. The right kidney measured 8.63 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 2.63 cm x 0.48 cm at the caudal pole and 0.48 cm at the cranial pole. The right adrenal gland measured 2.47 cm x 1.06 cm at the cranial pole and 0.79 cm at the caudal pole.

Spleen

The **spleen** presented subtle heterogeneous parenchymal changes.

Liver

The **liver** was diffusely hyperechoic to falciform fat. Multifocal hypoechoic nodular changes noted up to 1.53 cm. The gallbladder and common bile duct were unremarkable.

Gastrointestinal

There was some residual chyme and gas was noted in the **stomach**, yet not pathological. This is consistent with end post prandial presentation. Transit of chyme into the small intestine was normal. Curvilinear patterns were maintained throughout the GI tract. No evidence of pathology. 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.

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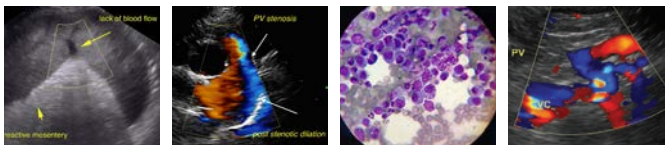

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ULTRASONOGRAPHIC FINDINGS

- Diabetic hepatopathy with nodular changes – expected for this metabolic type patient. Possibility of suppurative hepatitis.
- Subtly heterogeneous spleen
- Partially full stomach

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

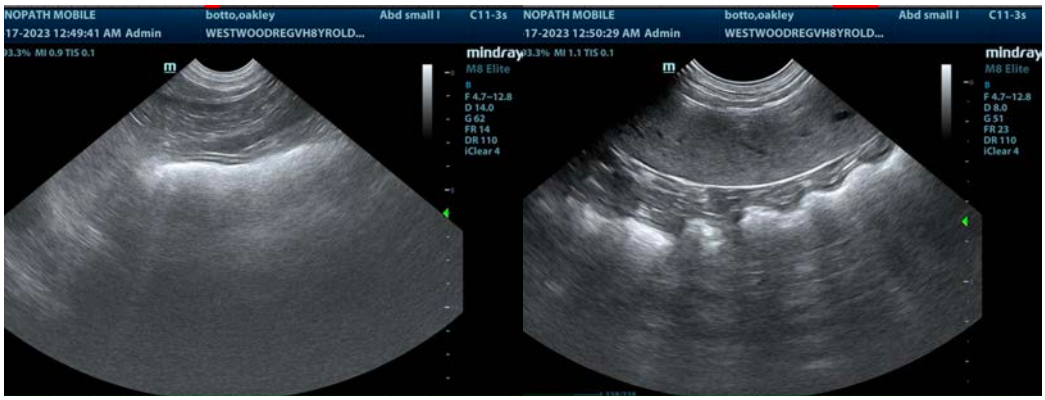
Bile acid profile and FNA of the liver nodules would be indicated for further definition +/- culture.

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
- Antibodies to insulin
- Underlying Neoplasia
- Diffuse liver disease

For an additional charge, internal medicine consult can be utilized through Sonopath.com. You can select the internal medicine drop down at http://spa.sonopath.com/.

One of the world's top internists & SonoPath associate Dr. Remo Lobetti BVSc, MMedVet, PhD, DECVIM can evaluate your case through SonoPath. https://sonopath.com/resources/sonopath-services/internal-medicine-teleconsultation-services



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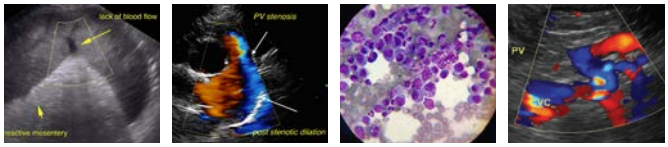

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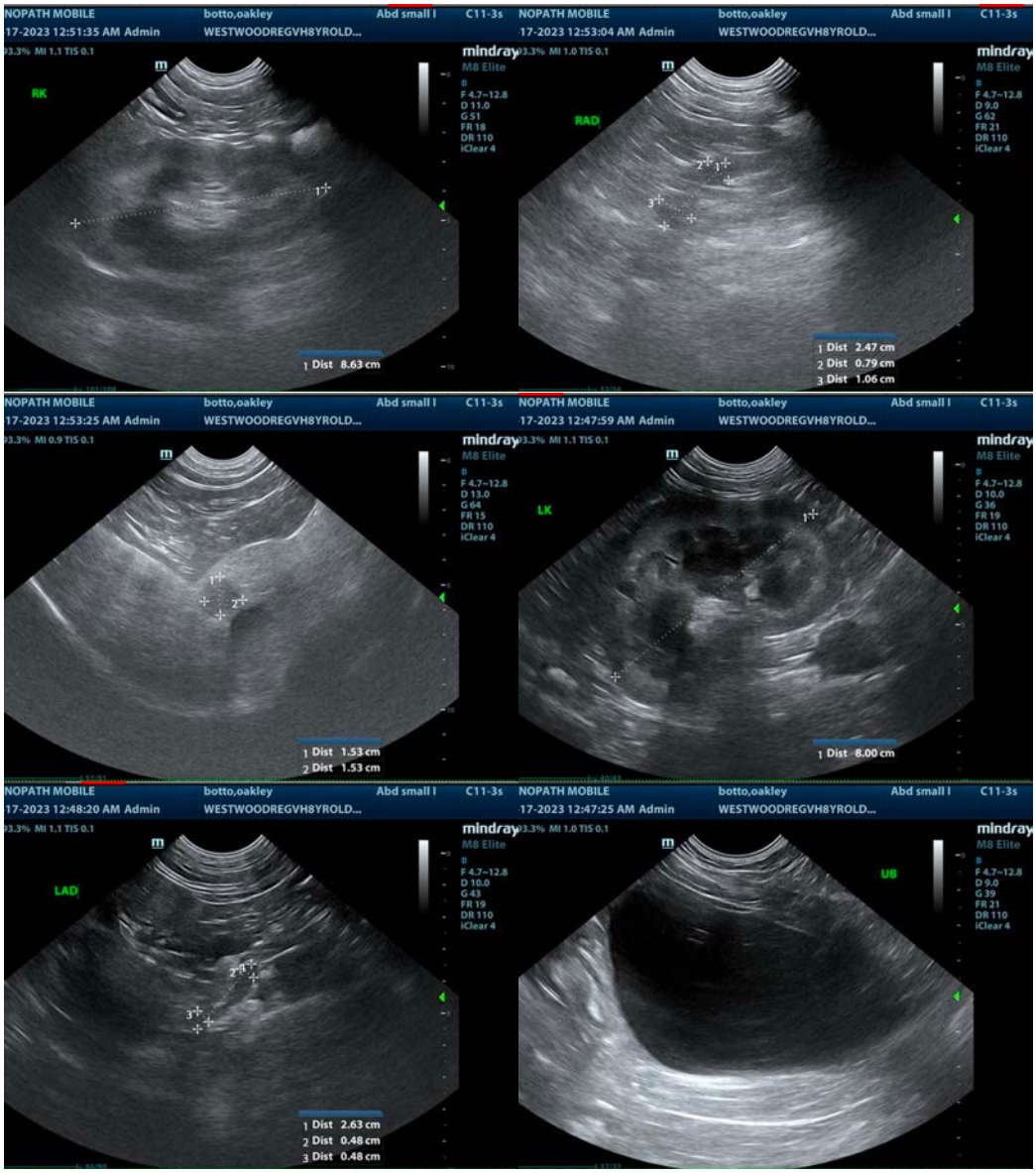

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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

info@SonoPath.com