

**DATE**

10/28/22

PATIENT

Gibbs Wagner

SPECIES

Canine

BREED

Pomeranian X

SEX

Neutered Male

AGE

10/28/10

WEIGHT

23.5 Pounds

INTERPRETED BYEric Lindquist, DMV
DABVP, Cert. IVUSS**IMAGING PERFORMED BY**

Rachel Brilhart RDMS

HOSPITAL NAMEAnimal Emergency
Hospital**REFERRING VET**

Dr. Willer

INVOICE

42490

PRESENTING CLINICAL SIGNS

Known DM, renal disease, heart murmur, per RDVM's notes- splenic nodules, nodule on right adrenal, proteinuria owner found him at the base of the stairs- shaking, tremoring, foaming at the mouth; had urinate on himself and then became limp no previous seizure activity on/off vomiting 1-2 x a week did not get insulin last night (owner fell asleep) did not get insulin this morning is on vetsulin 8 units BID telmisartan 15mg- 3/4 tablet once a day (in am)- for the proteinuria. Previous AUS 7/18/22 at AVIM – attached.

Current Medications: Midazolam, Vetsulin, Lepra, Diazepam.

Lab Results: See attached.

Radiographs: mass effect in the right cranial quadrant (in the area of the liver/stomach region) large bladder

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

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. The left kidney measured 4.69 cm with pyelectasia of 0.53 cm. The right kidney measured 4.5 cm with pyelectasia of 0.29 cm. Cortical cysts noted in both kidneys.

Adrenal Glands

The **left adrenal gland** presented a swollen caudal pole, measuring 0.73 cm. Cranial pole measured 0.51 cm. Length measured 2.01 cm.

The **right adrenal gland** revealed an expansive nodule measuring 1.7 cm x 1.4 cm at the cranial pole. The right adrenal gland measured 2.63 cm x 1.7 cm at the cranial pole and 0.80 cm at the caudal pole.

Spleen

The **spleen** presented an expansive nodule, measuring 1.0 cm at the mid body. Minor heterogeneous changes noted elsewhere.

Liver

The **liver** was uniformly swollen with minor, excessive gallbladder debris and over distension (measured 5.5 cm x 3.5 cm) with some striating but mostly dependent bile. The liver presented coarse architecture with mildly increased portal markings and subtle, mixed echogenic changes. This is consistent with vacuolar hepatopathy and some level of remodeling and history of inflammatory component. There was no overt suspicion of neoplasia.

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. 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. Some parenchymal remodeling, however, with mild deviation from curvilinear normalcy was observed. Pancreatic duct and capsular irregularities were present consistent with age related changes. If pain upon imaging (+ Murphy sign) was present or if the patient is focally painful in subxyphoid palpation then low-grade smoldering chronic pancreatitis should be suspected.

ULTRASONOGRAPHIC FINDINGS

- Diabetic nephropathy with pyelectasia and moderate degenerative changes
- Emerging gallbladder mucocele
- Pancreatic remodeling
- Right adrenal nodule – adenoma, adenocarcinoma, pheochromocytoma, capsular expansion present without capsular escape.
- Slight irregular left adrenal gland
- Splenic nodule

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

FNA of the splenic nodule indicated. Serial blood pressures warranted. If hypertension is present, urine catecholamine indicated. The right adrenal gland should be monitored. If growing, then right adrenalectomy would be appropriate. If the patient appears cushingoid, workup for adrenal dependent Cushing's indicated. Nodular hyperplasia, hemangiosarcoma, round cell neoplasia, or abscessation/splenitis all possible regarding the splenic nodule.

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

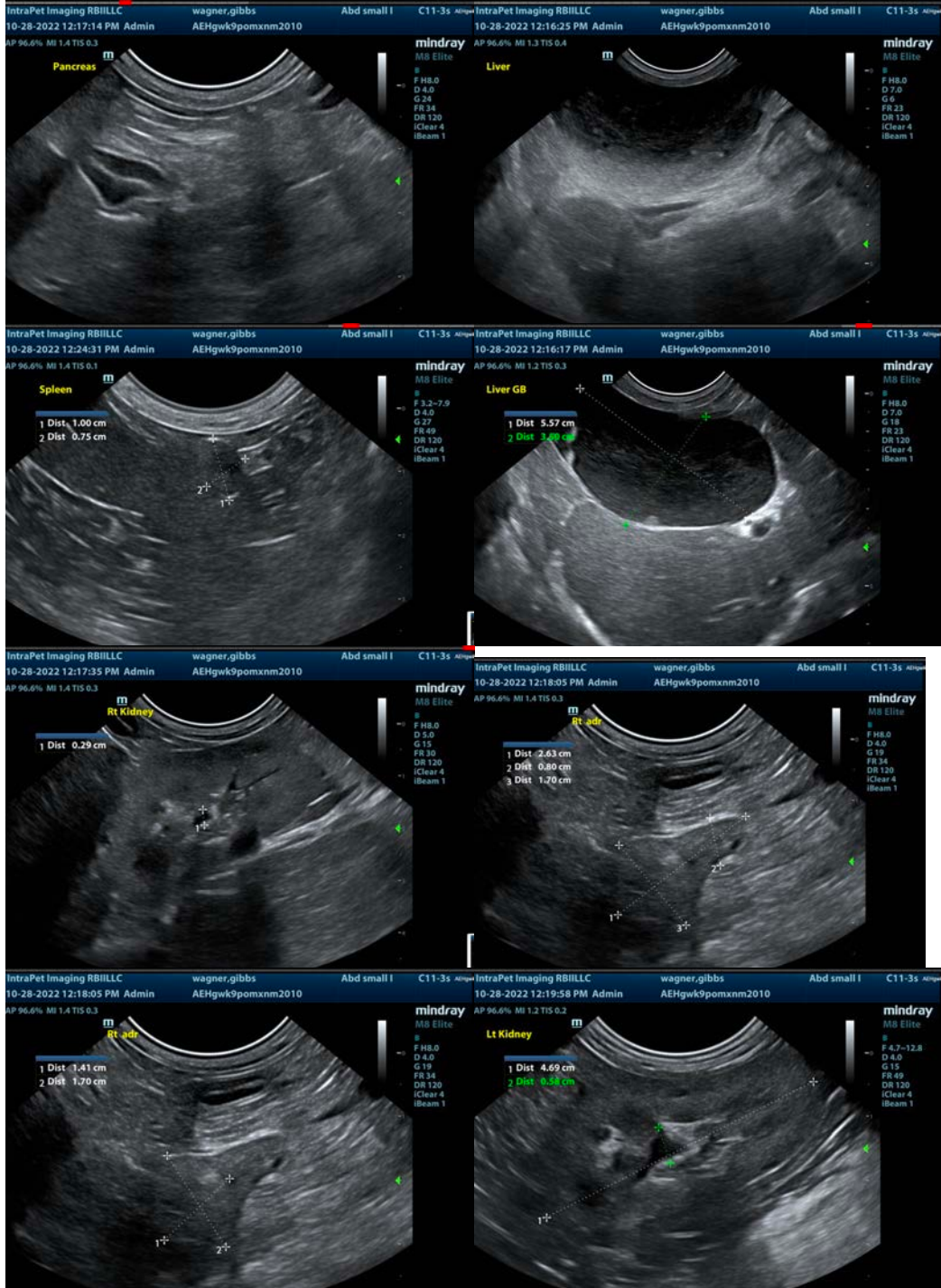
Antibodies to insulin

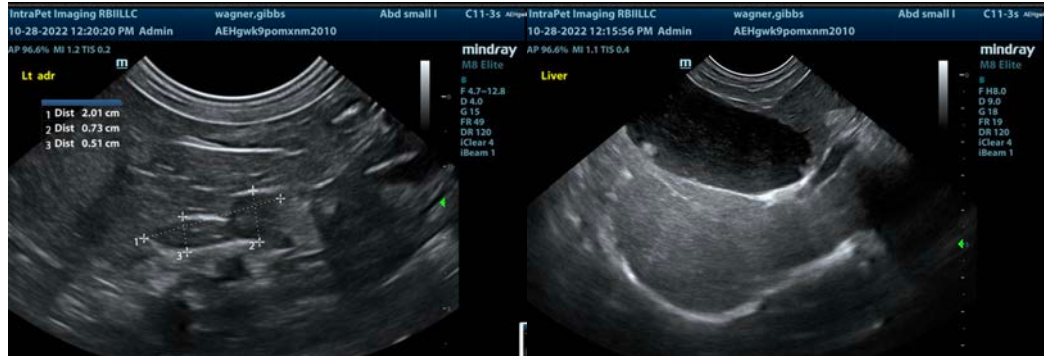
Underlying Neoplasia

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>





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.

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