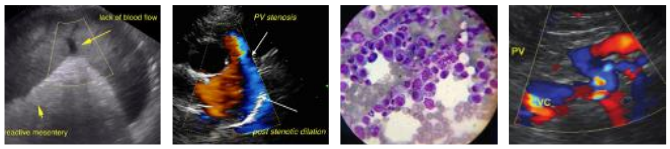
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



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

PATIENT

Mercedes Hamm

SPECIES

Canine

BREED

Rottweiler

SEX

Spayed Female

AGE

6 Years

WEIGHT

108 Lbs.

INTERPRETED BY

Eric Lindquist, DMV DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Kalenius

HOSPITAL NAME

Willamette VS

REFERRING VET

Jimmerson

INVOICE

13169

DATE

12/27/21

PRESENTING CLINICAL SIGNS

History: New diabetic hospitalized for inappetance and vomiting (suspect pancreatitis). Developed melena and severe anemia while hospitalized - suspect GI ulceration. Received pRBC transfusion. NG tube just placed

Abnormal PE/Chem/CBC/UA Results: PE obese, lethargic, pale mm CRT 2-3 sec. mild tachycardia and 1/6 left apical systolic murmur, lungs clear, abdomen distended, no fluid wave. Requires assisance to rise but can ambulate without assistance. Mild distal limb edema bilateral PL. Obese. Masseter / temporal muscle atrophy. Not eating. no v/d. Labs: rDVM labs: 12/21 = HCT 44%, WBCs 27.2k, Neuts 23.2k, normal PLT, Glu >680, Creat 4.0, BUN 74, ALT 90, ALP 168. UA = USG 1.021, ketones, suspect cocci, amylase 2479, lipase 5327 12/23 = HCT 47%, WBCs 20.1k, neuts 14.2k, normal PLT, Glu >567, Creat 2.2, BUN 28, ALT 186, ALP 235. UA = no ketones, USG 1.014 PCV/TS = 25%, 6.0 Chem10 = CREA 3.4, BUN 107, low TP 4.5, low Glob 2.2, Gluc >686 EPOC = high normal pH 7.46, lactate high normal 2.92, low Cl 95, K 4.9, low Na 126, Gluc >700, Creat 3.17, BUN 107 UA = unable to collect sample prior to IVF as bladder too small and pt too thick for 1.5" Passed melena and developed severe anemia while hospitalized. 12/26 6pm PCV 17%, 5.2 EPOC = Crea 2.23, BUN 83, Gluc 671, HCT 14% Today (12/27): - Post transfusion -PCV/TS = 21%, 5.0 - EPOC = Crea 1.73, BUN 48, pH 7.48, Glu 429. lytes wnl - CBC = HCT 21,3%m HGB 7.2 g/dl, RBC 3.18 M/ul, MPV 17.4, WBC 22.06 k/ul, Monos 1.2 k/ul, NEU 17.95 k/ul, PLT 20 k/ul **PATH REVIEW PENDING. - CHEM 17GLU 494m BUN 42 (CREA hight normal 1.7), TP 4.8 g/dl all other values wnl. - cortisol = 4.98 ug/dL

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 pelvic urethra was imaged 2.0 cm beyond the cystourethral junction. Iliac trifurcation was unremarkable.

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 8.6 cm. The right kidney measured 8.5 cm.

Adrenal Glands

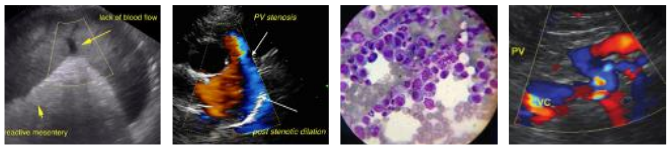
The **left adrenal gland** was visualized and recognized as having normal shape, size, position and echogenicity for this breed. The phrenic vasculature, glandular echogenicity and detail were unremarkable. Capsule, cortex, and medullary definition were normal for this age patient. The left adrenal gland was subjectively flattened, measuring 2.65 cm x 0.42 cm.

The **right adrenal gland** was not visualized.

Spleen

The **spleen** revealed heterogeneous nodular changes with irregular contour.

Liver



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The **liver** was uniformly enlarged with minor heterogeneous parenchymal changes.
The **gallbladder** was mildly over distended with minor suspended and dependent debris, yet not to the level of emerging mucocele, yet sludge appears to be mildly excessive. No adjunctive inflammation was noted. This change is most consistent with diabetic hepatopathy.

Gastrointestinal

A minor amount of chyme was noted in the **stomach**. No overt evidence of ulceration. Microulceration could not be completely ruled out. The small intestine and colon were unremarkable.

Pancreas

The right limb of the **pancreas** was hypoechoic and mildly irregular. 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

- Minor heterogeneous pancreas
- Diabetic nephropathy
- Diabetic hepatopathy
- Gallbladder sludge
- Nodular spleen. Concern for possibility of round cell neoplasia versus hyperplasia. Splenic FNA indicated. CBC path review +/- bone marrow aspirate would be indicated.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

GI protectants warranted to cover for microulceration. However, no macroulcerative changes noted.

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

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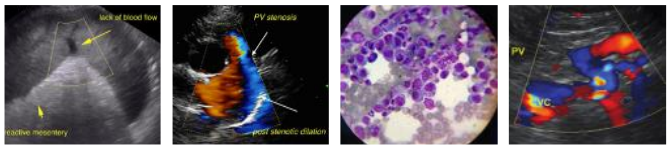

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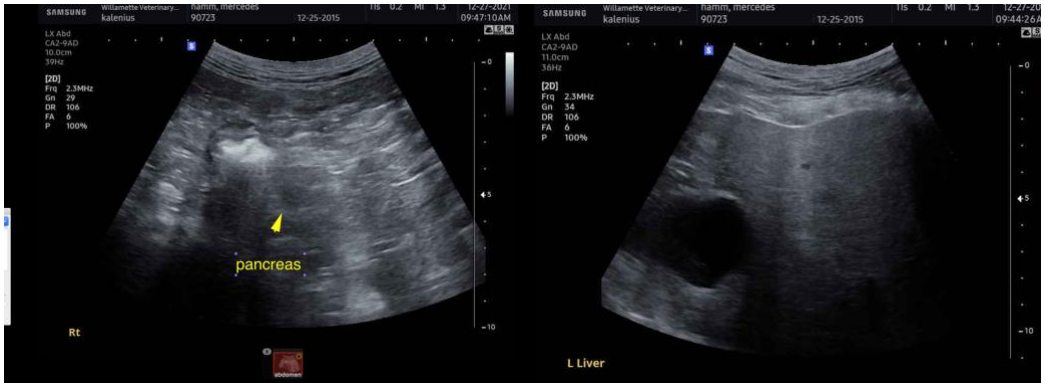

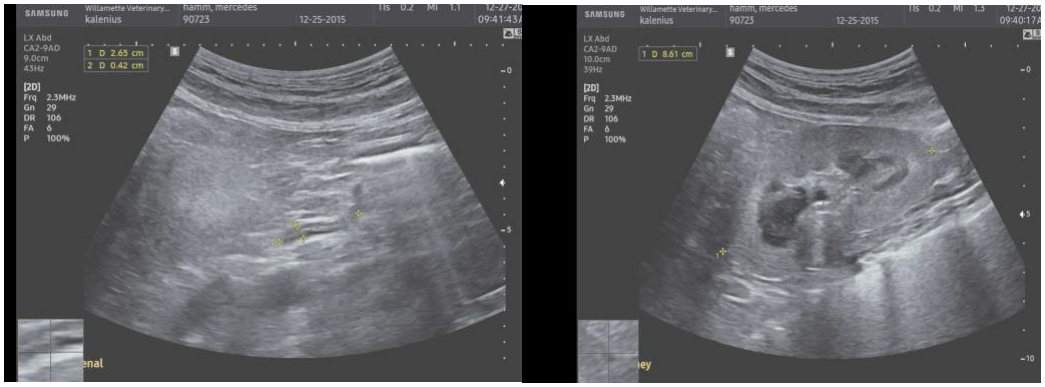

The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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
info@SonoPath.com