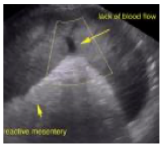
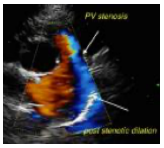
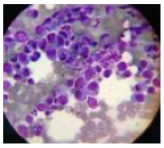
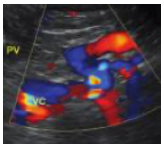
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

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

PATIENT
Riiva Olson

SPECIES
Canine

BREED
Smooth Collie

SEX
Spayed Female

AGE
4 years

WEIGHT
40 lbs

INTERPRETED BY
Andrea Nicastro, DVM, Diplomate ACVIM (*Small Animal Internal Medicine*)

IMAGING PERFORMED BY
Tessa Maggiulli

HOSPITAL NAME
Willamette VH

REFERRING VET
Tessa Maggiulli

INVOICE
12452

DATE
3.20.23

PRESENTING CLINICAL SIGNS

History: rDVM transfer from All Creatures, recently diagnosed diabetic, had been losing wt 1-2 weeks, started on vetsulin, was given her first dose 3/17 at 11am and o had administered insulin, went to RDVM and was a DKA. Hospitalized 3/17 and on treatments for DKA, severe hematochezia, hypokalemia, hyperglycemia, hypophosphatemia, and minimal appetite. P showing modest improvements in hospital.

Abnormal PE/Chem/CBC/UA Results: 10:30a EPOC- Bicarb 8.5 (L), Ca 1.04 (L), Glu 439 (H), Na 138 (L), PCO2 20.4 (L), pH 7.229 (L), PO2 (H), TCO2 7.7 (L), BE -19.1 (L), BUN 27 (H), K wnl 3.5, hct 42% K normalized, metabolic acidosis 8p Chem 17- Glu 366 (H), Phos1.2 (L), Ca 6.8 (L), TP 4.4 (L), Alb 2.1 (L), Glob 2.3 (L), ALT 412 (H), GGT 23 (H), Tbili 4.5 (H), Amy 1511 (H) 8p EPOC- Bicarb 8.3 (L), Ca 1.09 (L), Glu 360 (H), K 3.1 (L), PCO2 19.3 (L), pH 7.238 (L), PO2 82.0 (H), TCO2 (L), BE -19.2 (L), BUN 28 (H) Hyperglycemia, hypokalemia, metabolic acidosis 3/18-3/19 overnight 2am - EPOC- HCT 37%, BiCarb 10.1, iCa 1.09, GLU 271, K+ 3.0, pH 7.311, BEecf -16.1, BUN 23 BG curve-472, 384, 304, 433, 283, 185 (7-10 ml/hr insulin CRI)

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder wall is normal in thickness and the mucosal surface is smooth. The bladder is moderately distended. Luminal contents are anechoic. No cystic calculi are observed. The region of the trigone and the proximal urethra, visible to a depth of 2 cm, are normal.

The left kidney is subjectively normal in size with a normal shape, architecture and smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with normal corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

The right kidney is normal in size (6.27 cm in length) with a normal shape, architecture and smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with normal corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

Adrenal Glands

The left adrenal gland is normal in size (0.55 cm at cranial pole) (0.66 cm at caudal pole) with a normal shape and homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

The caudal pole of the right adrenal gland is visualized and is in normal size (0.53 cm in width) with a normal shape, glandular echogenicity and detail. Surrounding vasculature are normal.

Spleen

The spleen is normal in size (1.36 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

Liver

The liver is subjectively prominent to enlarged with smooth peripheral contours. The parenchyma is hyperechoic relative to the spleen and subtly mottled in appearance. No distinct focal lesions are observed. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion.

The gall bladder lumen is moderately distended. The wall is thin and smooth. A moderate amount of mostly gravity dependent echogenic debris is observed within the lumen. The cystic and common bile ducts are normal/not seen.

Gastrointestinal
The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is mildly distended with ingesta. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The pyloric outflow tract is patent. The small intestinal lumen is not dilated. The small intestinal wall is normal in thickness with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. There is no evidence of an obstructive pattern.

Pancreas
The region of the pancreas is isoechoic relative to surrounding omental fat. No obvious parenchymal abnormalities are observed. There is no evidence of regional inflammation or effusion.

Free Abdomen
The peritoneal cavity is normal. There is no evidence of inflammation or effusion. The abdominal lymph nodes are normal/not visible.

Other
A uterine stump is visible. No obvious abnormalities are seen.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

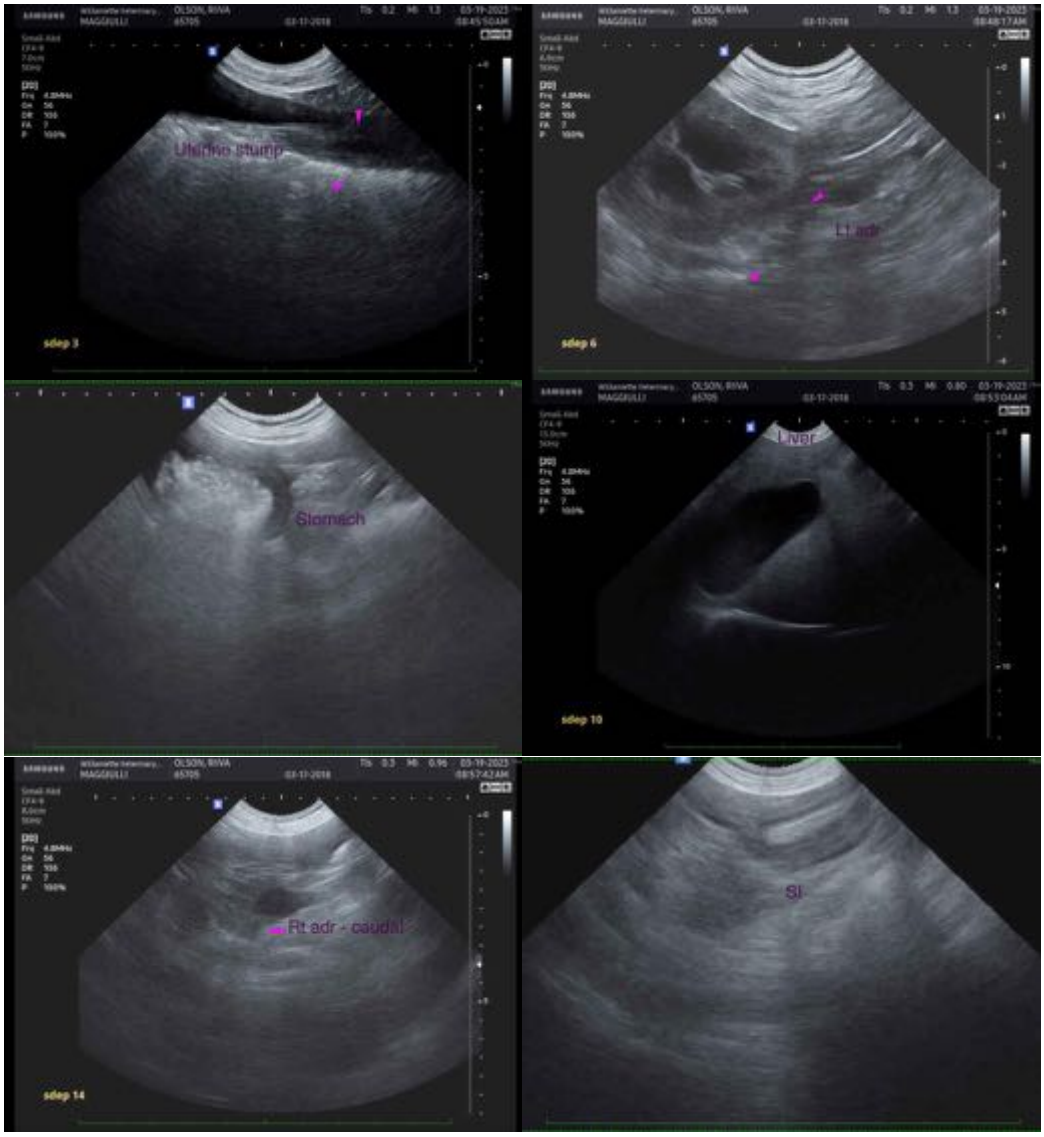
- The hepatic parenchymal changes could be consistent with a diabetic hepatopathy, inflammatory disease, (i.e., bacterial cholangiohepatitis, chronic hepatitis), hepatotoxicosis (i.e., copper), Leptospirosis, other hepatopathy, or some combination thereof.
- Gall bladder debris, non-mucocele

Secondary Findings

- Visible uterine stump - incidental

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Given the patient's liver values, consider Leptospirosis testing (if clinical suspicion for the disease is high), +/- a fine-needle aspirate (if clotting status is appropriate). A 25-gauge needle should be used.
- Also consider empirical treatment for bacterial cholangiohepatitis (i.e., broad-spectrum antibiotics, hepatic antioxidants).
- A cPLI would also be useful in assessing for mild pancreatitis.
- Given that the patient is a new diabetic, also consider a urine culture and sensitivity, as many new diabetics have occult urinary tract infections.
- Thoracic radiographs would also be useful in assessing cardiopulmonary status.
- Continued supportive care for diabetic ketoacidosis is also recommended.



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.

Andrea Nicastro, MPH, DVM, Diplomate DACVIM (Small Animal Internal Medicine)
info@SonoPath.com