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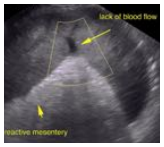
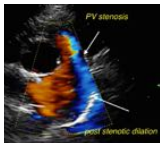
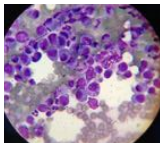
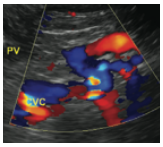

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1-800-838-4268 info@sonopath.com

PATIENT

Princess Cummings

SPECIES

Canine

BREED

Mix

SEX

Spayed female

AGE

10 years

WEIGHT

16.6 lbs

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Dr. Nieuwal

HOSPITAL NAME

Animal Emergency Hospital Volusia

REFERRING VET

Dr. Nieuwal

INVOICE

42900

DATE

12/6/22

PRESENTING CLINICAL SIGNS

History: P present for vomiting, panting, not eating, drinking a lot then regurgitating, and lethargy for 2 days. P is diabetic (Vetsulin 9u BID). O has been giving insulin while P has not been eating. has been diabetic for the last 6 months.
Abnormal PE/Chem/CBC/UA Results: large ketones PLT 574, WBC 22.15, LYM 14.38, glucose 610 mg/dL (on epoc), creat 4.19 (epoc), BUN 93 (epoc), ionized calcium 0.53, chloride 73, sodium 112, BUN 111(on chem), creat 2.8 (chem), phos 10.9, calcium 6.1 (chem), albumin 5.7, globulin 1.7, glucose 558 mg/dL (on chem), cholesterol >450, ALP 734

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** revealed normal size and structure, corticomedullary definition and ratio for this age. The cortices presented largely uniform texture with normal echogenic relationship to liver and spleen. Medullary structure differed distinctly from the cortex and no evidence of pelvic dilation was present. The capsules were acceptably uniform without significant irregularities. The left kidney measured 5.0 cm with slight pyelectasia.

Adrenal Glands

The right **adrenal gland** was enlarged and measured 2.4 x 1.8 cm at the cranial pole and 1.15 cm at the caudal pole. The left adrenal gland was visualized from the right approach and measured 1.9 x 0.83 cm at the cranial pole and 0.8 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** was uniformly swollen with minor, excessive gallbladder debris and over distension with dependent and suspended bile without evidence of overt mucocele formation. However, excessive sludge was present. 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.

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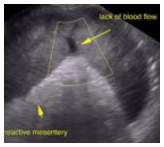
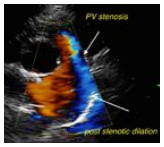
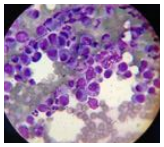
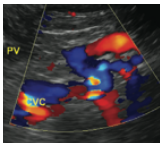

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Gastrointestinal

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 **pancreas** revealed minor, irregular hypoechoic parenchyma in the right limb. The region measured 3.0 cm. Low-grade inflammation is suspected.

ULTRASONOGRAPHIC FINDINGS

Minor pancreatitis pattern.

Bilateral adrenal hypertrophy. Potential concurrent pituitary dependent hyperadrenocorticism.

Diabetic nephropathy and hepatopathy.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Acute renal insult owing to DKA is likely the cause of azotemia in this patient. 72-hour IV fluid protocol and gradual stabilization of the diabetic state is indicated. Eventual work-up for pituitary dependent hyperadrenocorticism is likely necessary if isosthenuria is a persistent issue.

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

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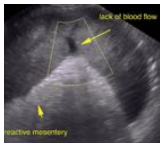
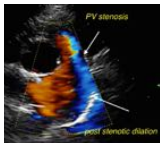
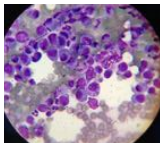
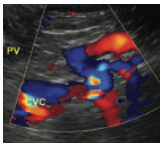

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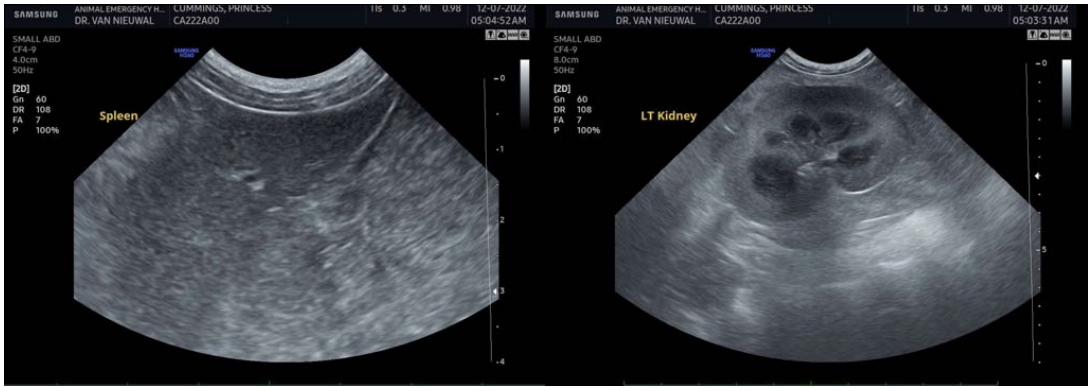
Diffuse liver disease



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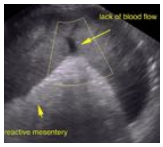
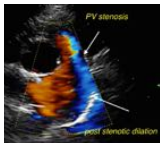
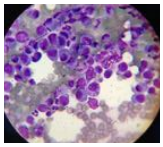
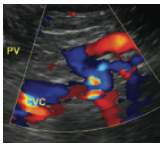

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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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