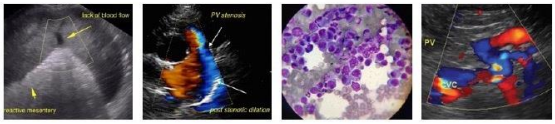


PATIENT

Toby Dubicanac

SPECIES

Canine

BREED

Lhasa Mix

SEX

MN

AGE

8yr

WEIGHT

5.2kg

INTERPRETED BY

R. McKenzie Daniel, DVM, DABVP (Canine and Feline)

IMAGING PERFORMED BY

Kelly Reschny

HOSPITAL NAME

Hamilton Region Veterinary EC

REFERRING VET

Dr. Grewal

INVOICE

13613ag

DATE

04/27/2023

PRESENTING CLINICAL SIGNS

Patient presented to HREVC on April 25th a second opinion for lethargy + anorexia + renal insufficiency + 1 week history of weight loss (1 lbs). Patient was low energy + hyporexic for 1 week before progressing to anorexia on April 25th.

Abnormal PE/Chem/CBC/UA Results: rDVM Bloodwork: 10/29/2022 Normal WBC count, m1 neutrophilia (12.71x10^9/L), m1 monocytosis (1.25x10^9/L) Creatinine and urea WNL (44 umol/L & 3.5 mmol/L respectively) High normal TP (normal albumin, m1 hyperglobulinemia 51 g/L; A:G ratio 0.5) m1 increased ALT (159 U/L) m1 hypochloremia (108 mmol/L) cPL normal 01/20/2023 Low normal Hct (0.35) Normal WBCs Normal TP and globulins; m1 hypoalbuminemia (18.3); A:G ratio 0.5 ALT WNL m1 azotemia (Creat 141 umol/L & BUN 13.3 mmol/L) m1 hypocalcemia (total) - 2.02 4DX testing - do not have results 04/20/2023 m1 normocytic, normochromic, non-regenerative anemia (Hct 0.32) Normal WBCs TP 59 g/L, m1 hyperglobulinemia (39.1 g/L) & m2 hypoalbuminemia (19.9 g/L) - A:G ratio 0.51 m1 increased amylase (1629 U/L) m2 azotemia (Creatinine 319 umol/L & BUN 28.2 mmol/L, SDMA 1.70 umol/L) m3 hyperphosphatemia (4.75 mmol/L) rDVM Urinalysis: 04/24/2023 - rdvm (free catch) USG 1.020 WBC 5-6/HPF, no RBCs Squamous epithelial cells 3-4/hpf pH 7 3+ proteinuria 3+ cocci ABNORMAL Labwork Values today: Lepto Witness Test 4/26/2023: Negative Urinalysis 4/26/2023: USG 1.018 (1.035-1.060) Proteinuria 500mg/dL Glucosuria 50 mg/dL WBC 7/HPF RBC 8/HPF Bacteria present (Rods) Non-squamous epithelial cells 1-2/HPF Non-hyaline casts >1/HPF Urine C & S = PENDING Chem 8 4/27/2023 @ 2 am: Na=145 K=3.8 Cl=108 tCOs=26 AnGap=15 iCa=1.02 Glu=7.2 BUN=22.2 Crea=275 Hct=24 Hb=8.2

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 3 cm exhibited normal thickness and tone. Anechoic urine was present in the lumen with no uroliths or sediment. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes were noted.

Normal renal size with asymmetrical margination was present in both kidneys. The renal cortex presented uniformly increased in echogenicity with uniform echotexture. The renal cortex appeared to be hypertrophied resulting in an altered cortex: medulla ratio. Mild loss of corticomedullary distinction was also present. The renal medullary volume was subjectively reduced. No evidence of pyelectasia. The left kidney measured 4.9 cm in length. The right kidney measured 5.3 cm in length.

The area of the aortic trifurcation was free of pathology.

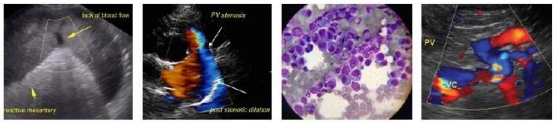
The area of the residual prostate appeared normal and free of pathology measuring 1.1 cm in diameter.

Adrenal Glands

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.49 cm width at the caudal pole and 2.3 cm length. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.55 cm width at the caudal pole and 1.9 cm length.

Spleen

The spleen exhibited a finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. The capsule was smooth and regular without apparent expansion. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or



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thrombosis. Acute to chronic inflammatory, neoplastic, or benign parenchyma changes were not noted.

Liver/Gallbladder

The liver presented mildly enlarged in size. The parenchyma of the liver was subjectively normal in echogenicity compared to the spleen and renal cortices. The liver parenchyma was uniform with a mildly coarse echotexture. The capsule of the liver was symmetrically rounded to mildly swollen in margination. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was non-distended in size with primarily anechoic luminal content. The cystic and common bile ducts were normal.

Gastrointestinal

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach was empty with no signs of ileus, obstruction or foreign material.

The small intestine presented intact wall layering with 1:3 muscularis/mucosa ratio. Intermittent non-specific minor hyperechoic mucosal speckling was present. No evidence of intestinal mural hypertrophy, loss of intestinal wall layering or intestinal masses. The lumen of the small intestine was empty with no signs of ileus, obstruction or foreign material.

Normal visible colon wall layers were present with apparent formed feces in lumen.

Pancreas

The left and right limb of the pancreas presented non-homogenous to mildly hypoechoic echogenicity compared to mild hyperechoic peripancreatic/generalized cranial abdominal omentum. Mildly prominent size and mild asymmetrical capsule margination was present with mild variable parenchymal swelling. No overt evidence of neoplasia.

Free Abdomen

No omental masses, overt lymphadenopathy or peritoneal effusion was present.

ULTRASONOGRAPHIC FINDINGS

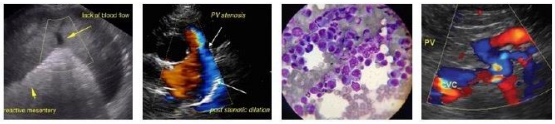
- Non-specific chronic frenal changes, possible non-specific nephritis.
- Variably prominent non-homogenous to mild hypoechoic pancreas with peripancreatic to regional cranial abdominal hyperechoic omentum-suggestive of mild active to chronic active pancreatitis.
- Gastroenteritis pattern.
- Mild hepatomegaly-nonspecific, subjectively benign.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Pending urine C/S, a UPC is suggested given the presence of proteinuria with quiet urinary bladder sediment to assess for evidence of protein losing nephropathy given azotemia and hypoalbuminemia.

Assessment for evidence of cranial abdominal/subxiphoid discomfort on palpation which may allude to chronic active pancreatitis is recommended to correlate with suspect active pancreatitis. A GI panel to include PLI/TLI/Cobalamin/Folate is recommended for further assessment of the pancreas as well as to assess for occult intestinal disease as a contributing factor to the clinical signs and hypoalbuminemia.

Sonographically the appearance of the kidneys did not overtly appear to be end stage yet chronic renal



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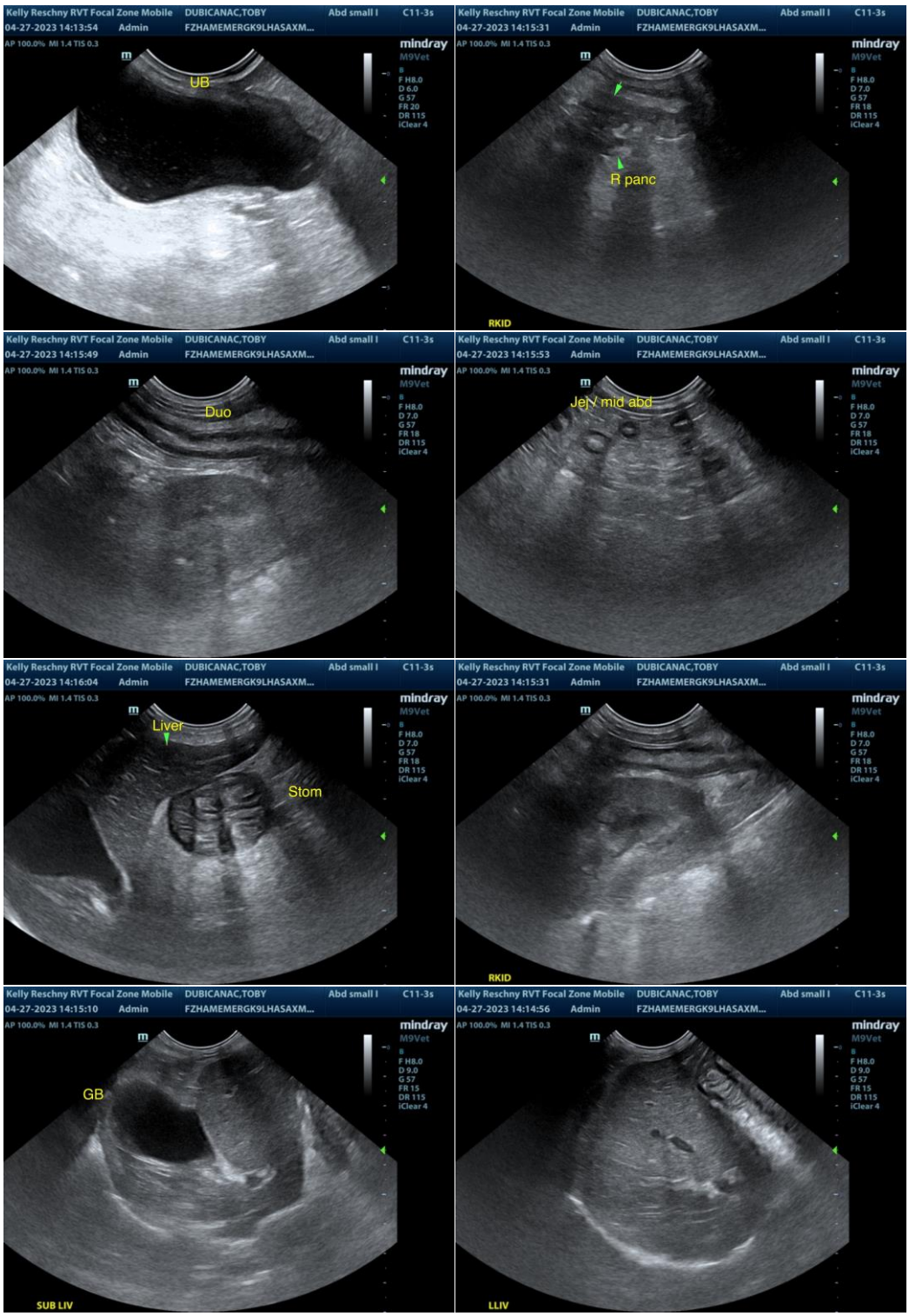
failure is a potential. Empirically and pending additional diagnostics, hospitalization with renal support and therapy for pancreatitis/gastroenteritis with assessment of clinical response and monitoring of renal parameters would be reasonable.



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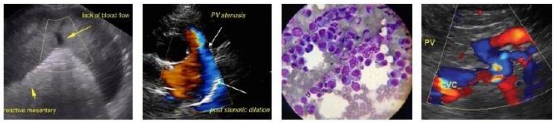

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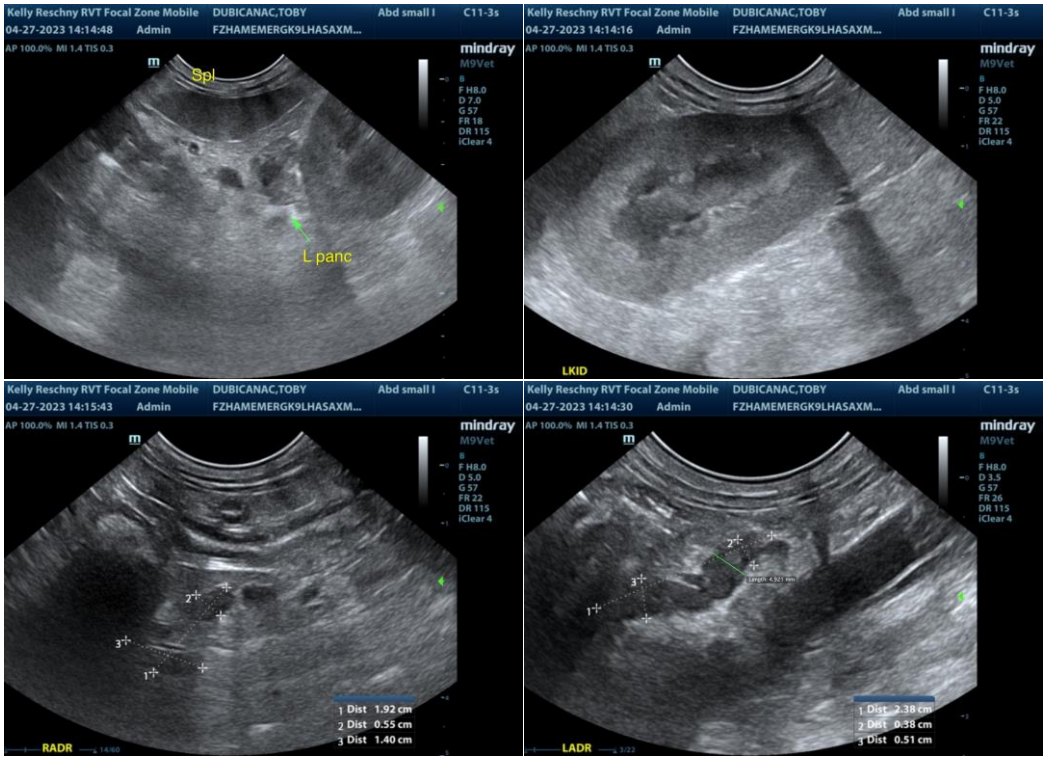

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)

info@SonoPath.com