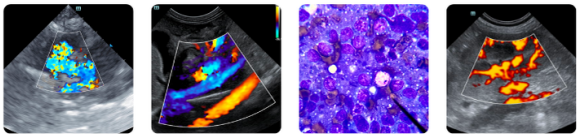


SonoPath www.thefocalzone.com
FOSTERING THE ART OF VETERINARY MEDICINE™ info@thefocalzone.com 289.808.2608

PATIENT

Lily Welch

SPECIES

Canine

BREED

Yorkie

SEX

Female Spayed

AGE

7y

WEIGHT

3 kgs

INTERPRETED BY

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

IMAGING PERFORMED BY

Crystal Hill

HOSPITAL NAME

East Plains AH

REFERRING VET

Visconti

INVOICE

13364

DATE

4/2/26

PRESENTING CLINICAL SIGNS

History: PE WNL, no D/V, no weight loss, no GI signs (littermate of Lily died recently of PLE that could not be controlled medically.

Abnormal PE/Chem/CBC/UA Results: Albumin M1 decreased SDMA 16(0-14) rest WNL

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 3.0 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.

The area of the aortic trifurcation was free of pathology.

Normal size and margination was present in the kidneys. A normal 1:3 cortex / medulla ratio and normal corticomedullary definition were maintained. The echogenicity of the cortex was similar to or slightly less than normal liver parenchyma while the medulla echogenicity was hypoechoic to the cortex with no evidence of pelvic dilation. The left kidney measured 2.7 cm in length. The right kidney measured 3.2 cm in length.

Adrenal Glands

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.40 cm width at the caudal pole. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.40 cm width at the caudal pole.

Spleen

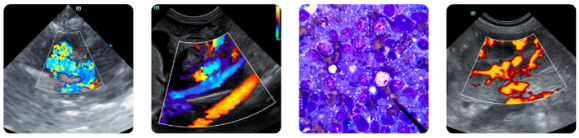
The spleen exhibited a finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. The capsule was smooth and regular without apparent expansion. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis. Acute to chronic inflammatory, neoplastic, or benign parenchyma changes were not noted.

Liver

The liver was subjectively normal in size, structure, and contour with normal vascular volume. The liver parenchyma was uniform and hypoechoic to the spleen with a mild coarse echotexture. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was non-distended in size with thin walls and 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 mild lumen gas.



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Generalized increased intestinal mucosa echogenicity with diffuse mucosa speckling to echogenic mucosal striations were present. Intact intestinal wall exhibiting propensity for mildly prominent duodenojejunal mucosa and mild hyperechoic jejunal mucosal striations. Intestinal wall layering was maintained with normal altered 1:3 muscularis / mucosa ratio. There was no evidence of an obstructive pattern or foreign material. The appearance of the small intestine is most consistent with protein losing enteropathy or lymphangiectasia. There was no evidence of infiltrative or neoplastic intestinal disease which is considered unlikely but cannot be ruled out without full thickness or endoscopic biopsies. Duodenum wall measured 0.40 cm and jejunum wall measured 0.38 cm.

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

Pancreas

The parenchyma of the pancreas was hyperechoic to adjacent omental fat with diffuse parenchyma remodeling. The capsule of the pancreas was mildly asymmetrical in contour without evidence of peripancreatic inflammation. These changes may suggest chronic inflammation, fibrosis, or saponification if previous history of pancreatitis. No overt signs of pancreatic neoplasia. Prominent pancreatic duct.

Free Abdomen

Intermittent, mildly enlarged mesenteric node was present. The lymph node was essentially isoechoic to adjacent omentum without evidence of peripheral inflammation and maintaining a normal width: length ratio (<0.5). Scant pockets of peritoneal effusion present. Segmental peri intestinal mildly hyperechoic omentum.

ULTRASONOGRAPHIC FINDINGS

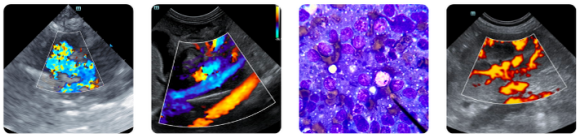
- Intact prominent intestinal wall exhibiting mild jejuna hyperechoic mucosal striations
- Chronic pancreatitis/fibrosis pattern with prominent pancreatic duct
- Regional peri intestinal hyperechoic omentum and scant effusion
- Intermittent mild mesenteric lymphadenopathy – suggestive of benign criteria, i.e. mild hyperplasia or lymphadenitis
- Sonographically unremarkable normal volume liver

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Although no current gastrointestinal signs or weight loss, the small intestine is highly suggestive of protein losing enteropathy criteria in conjunction with mild decreased albumin level, IBD or other inflammatory enteropathy. Lymphangiectasia considered less likely with other intestinal neoplasia or other enteropathy possible. A GI panel tom include PLI/TLI/Cobalamin/Folate is recommended. Gastrointetsinal support and monitoring for emerging gastrointestinal signs as well as serum albumin level for evidence of progressive hypoalbuminemia going forward is advised. Recheck sonogram if clinically indicated. Intestinal biopsies may be considered if albumin level >2.0.

Part or all of this protocol may be considered based on your clinical impression of the patient:

OBJECTIVE: keep albumin levels > 2 g/dl, avoid thromboembolism and cavitary effusions, monitor concurrent PLN and liver disease:
Plasma 10 mL / kilogram IV over 4 hours
Or **Human albumin** 2 ml/kg/h over 10 hours. Total daily volume 20.l/kg/day
And Colloids/Hetastarch



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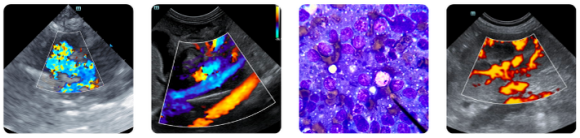
10 to 20 mL per kilogram per day and dogs
10 to 15 mL per kilogram per day cats
(Can bolus first 1/3 of dose over 15 minutes)
& maintain on LRS maintenance otherwise.
High colony count probiotic Proviable or Visbiome
Famotidine 1 mg/kg Iv Im po dc Sid /bid
Sucralfate 0.5-1 g po tid dogs, 0.5 g bid cats in slurry **Or Misoprostol** 1-5 ug/kg po tid
Diet: Highly digestible high-quality protein, low fiber, low fat diet (< 15% of dry matter). Hydrolyzed protein or novel protein. Purina HA or Royal Canine HP or similar.
Prednisone or prednisolone 2 mg/kg bid x 3-5 days then 2 mg/kg sid. **Chlorambucil** in refractive severe IBD/alimentary lymphoma cases (monitor cbc for rare bone marrow suppression) 4 mg/m^2 Q 24-48 hours.
Cobalamine (B12) 250-1500 ug/dog weekly x 6 weeks.
Calcium supplementation if necessary.
Aspirin 0.5-1 mg/kg/day **or Clopidogrel** (Plavix) 1-5 mg/kg/day.

Peritonitis Protocol
Colloids/Hetastarch
10 to 20 mL per kilogram per hour and dogs
10 to 15 mL per kilogram per hour cats
(Can bolus first 1/3 of dose over 15 minutes)
Plasma 10 mL / kilogram IV over 4 hours
Buprenorphine 0.02 mg/kg IV IM SC q4-6 hours **Or CRI Lidocaine** 30-50 ug/kg/min
Dolasetron for nausea: 0.6-1 mg/kg/day Iv or PO
Famotidine 1 mg/kg IV IM p.o. dc s.i.d. /b.i.d.
Sucralfate 0.5-1 g p.o. t.i.d. dogs, 0.5 g bid cats in slurry **Or Misoprostol** 1-5 ug/kg po tid
Clindamycin 10mg/kg IV p.o. bid
Enrofloxacin 10-15 mg/kg IV p.o. s.i.d. dogs, 5 mg/kg Iv po Sid cats
Metronidazole 10-20 mg/kg IV p.o. b.i.d.
Dexamethasone physiological 1 mg/kg to treat adrenal burnout if long standing sickness, shock dose 4-10 mg/kg.



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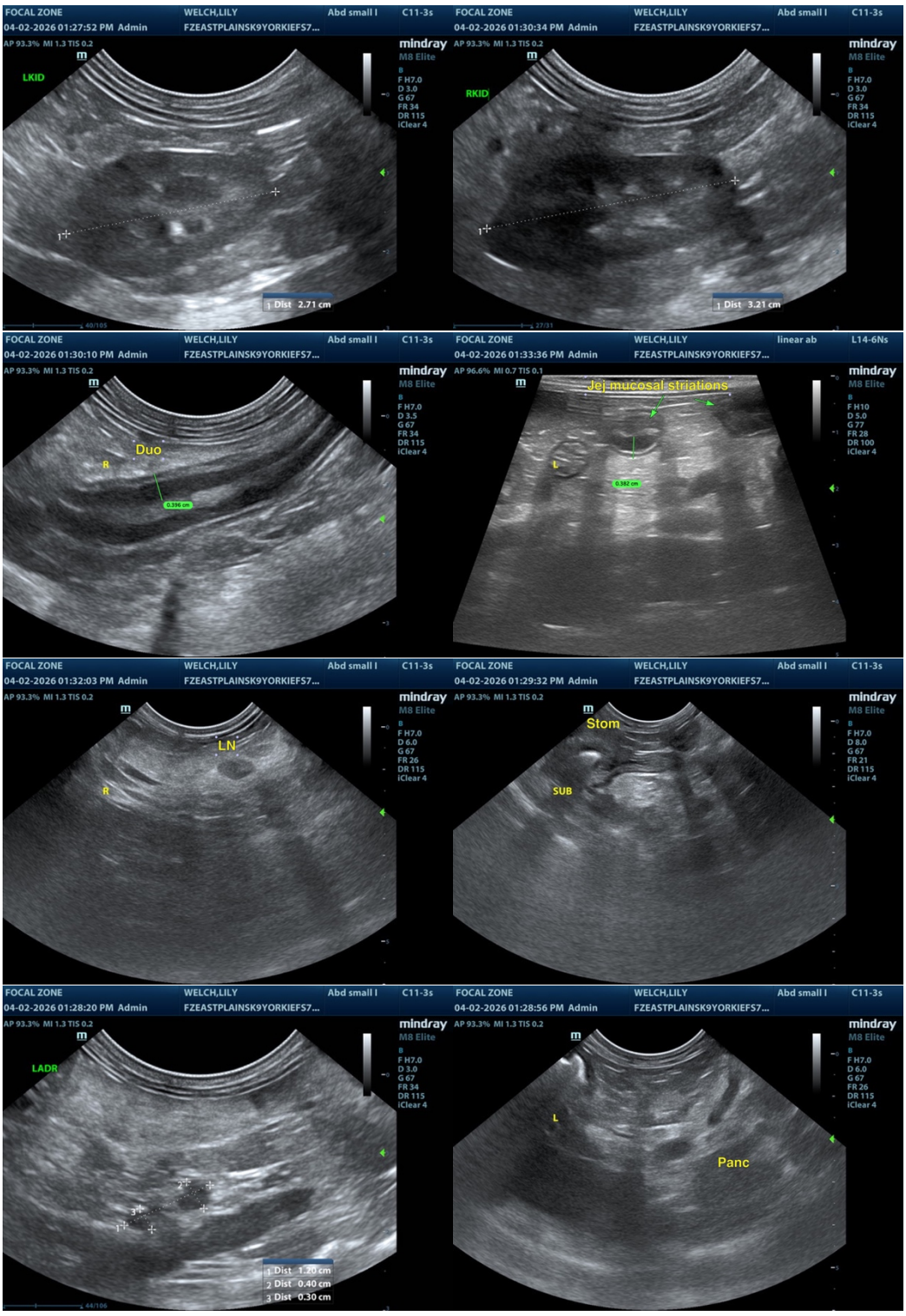

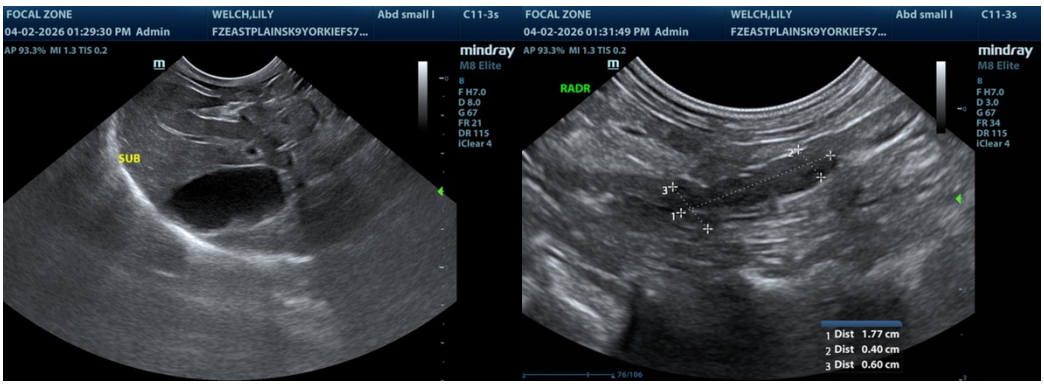

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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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