



PATIENT	PRESENTING CLINICAL SIGNS
Yuggie Bluemeke	Patient presented yesterday with weight loss, swollen abdomen, dependant edema noted in patients left hind limb, belly and face. Muscle atrophy along lumbar area and hind end. Pleural effusion throughout on xrays. Abd and cardiac detail decreased. Patient is still eating and drinking but less than normally. Chronic diarrhea- owner reports off and on loose stools. Never really passes a fully formed BM. R/O lymphangiectasia, PLE, neoplasia etc
SPECIES	Canine
BREED	Abnormal PE/Chem/CBC/UA Results: Please see attached radiographs. 4DX negative, CBC normal, Chem - protein was low but Albumin lower end of normal and rest of Chemistry WNL. Started Prednisolone and Metronidazole and Interceptor Plus.
Shep X	
SEX	ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN
MN	Urinary System
AGE	The urinary bladder, trigone, and cystourethral junction 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 was noted.
2 years	The area of the residual prostate was free of overt pathology.
WEIGHT	No evidence of medial Iliac or sublumbar lymphadenopathy/masses.
46.4 kg	Normal size and margination were 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 nephropathy or pyelectasia. The left kidney measured 6.1 cm in length. The right kidney measured 6.6 cm in length.
INTERPRETED BY	Adrenal Glands
R. McKenzie Daniel, DVM, DABVP	The left adrenal gland was indistinctly visualized owing to potential subnormal size secondary to Prednisone therapy. The left adrenal gland measured 2.9 cm length x 0.38 cm width at the caudal pole. The right adrenal gland was not definitively visualized.
IMAGING PERFORMED BY	Spleen
Crystal Hill	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.
HOSPITAL NAME	Liver/ Gallbladder
Prince Charles AH	The liver was subjectively normal in size, structure, and contour. 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. Normal hepatic vascular volume was noted without evidence of hepatic congestive criteria.
REFERRING VET	
Dr. Momi	
INVOICE	
15580	
DATE	
12/2/22	



PATIENT	The gallbladder was non-distended in size containing mild echogenic nonorganized gallbladder debris. The cystic and common bile ducts were normal.
Yuggie Bluemeke	
	<i>Gastrointestinal</i>
SPECIES	The stomach presented intact, mildly prominent wall layering with suspect gastric wall edema. A mild amount of retained nonshadowing ingesta / chyme was present in the stomach.
Canine	
	The small intestine presented intact wall layering and primarily maintained a 1:3 muscularis/mucosa ratio with subjective segmental mild intestinal mucosal speckling to fogging.
BREED	
Shep X	Normal visible colon wall layers were present containing soft to semi-formed fecal matter consistent with patient history.
	<i>Pancreas</i>
SEX	
MN	The parenchyma of the left limb, body, and right limb of the pancreas presented isoechoic to the adjacent omental fat. A normal curvilinear capsule contour of the pancreas was present. The visible pancreatic duct was normal. No signs of active inflammation or neoplastic disease were evident.
AGE	
2 years	<i>Free Abdomen</i>
	Moderate to marked volume primarily anechoic peritoneal free fluid was present. Generalized mild uniform hyperechoic mesentery was noted. No overt lymphadenopathy or omental masses were present.
WEIGHT	
46.4 kg	

ULTRASONOGRAPHIC FINDINGS

INTERPRETED BY

R. McKenzie Daniel,
DVM, DABVP

IMAGING PERFORMED BY

Crystal Hill

- Segmental small intestinal mucosal speckling / fogging
- Moderate to marked primarily anechoic peritoneal free fluid
- Normal liver without evidence of overt hepatic congestion
- Mild gallbladder debris (non-mucocele)
- Minor retained gastric ingesta with suspect mild gastric wall edema

HOSPITAL NAME

Prince Charles AH

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Without evidence of overt hepatic congestive criteria, and in conjunction with the decreased protein levels and history of chronic diarrhea, protein-losing enteropathy is strongly suspected. Considerations may include; IBD, lymphangiectasia, or less likely in this case, infiltrative intestinal neoplasia.

REFERRING VET

Dr. Momi

Correlation with ideally brief sonographic assessment of the heart to rule out evidence of structural cardiomyopathy, as well as effusion analysis, cytology, +/- C/S if evidence of inflammatory cells is suggested. A GI panel to include PLI/TLI/Cobalamin/Folate is recommended. Intestinal biopsies are likely required for a definitive diagnosis, yet may be contraindicated if albumin levels <2.0.

INVOICE

15580

Empirically, some or all of the following protocol may be considered.

DATE

12/2/22



PATIENT	OBJECTIVE: keep albumin levels > 2 g/dl, avoid thromboembolism and cavitory effusions, monitor concurrent PLN (Wheaton Terrier PLE/PLN) and liver disease:
Yuggie Bluemeke	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
SPECIES	And Colloids/Hetastarch
Canine	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.
BREED	Metronidazole (10-20 mg/kg po bid)
Shep X	Famotidine 1 mg/kg lv 1m po dc Sid /bid
SEX	Sucralfate 0.5-1 g po tid dogs, 0.5 g bid cats in slurry Or Misoprostol 1-5 ug/kg po tid
MN	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.
AGE	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.
2 years	Cobalamine (B12) 250-1500 ug/dog weekly x 6 weeks. Calcium supplementation if necessary. Aspirin 0.5-1 mg/kg/day or Clopidrel (Plavix) 1-5 mg/kg/day.

WEIGHT
46.4 kg

INTERPRETED BY
R. McKenzie Daniel,
DVM, DABVP

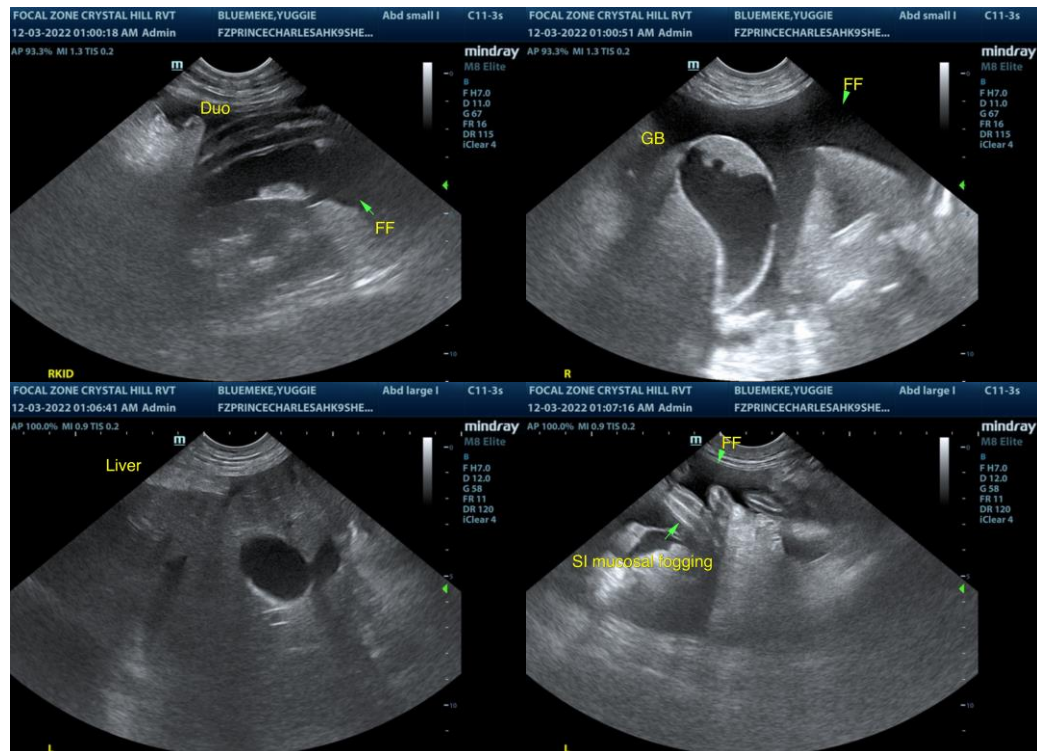
IMAGING PERFORMED BY
Crystal Hill

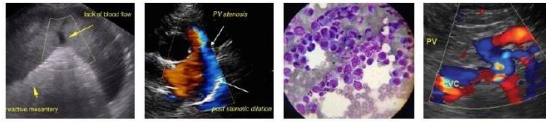
HOSPITAL NAME
Prince Charles AH

REFERRING VET
Dr. Momi

INVOICE
15580

DATE
12/2/22





PATIENT

Yuggie Bluemeke

SPECIES

Canine

BREED

Shep X

SEX

MN

AGE

2 years

WEIGHT

46.4 kg

INTERPRETED BY

R. McKenzie Daniel,
DVM, DABVP

**IMAGING
PERFORMED BY**

Crystal Hill

HOSPITAL NAME

Prince Charles AH

REFERRING VET

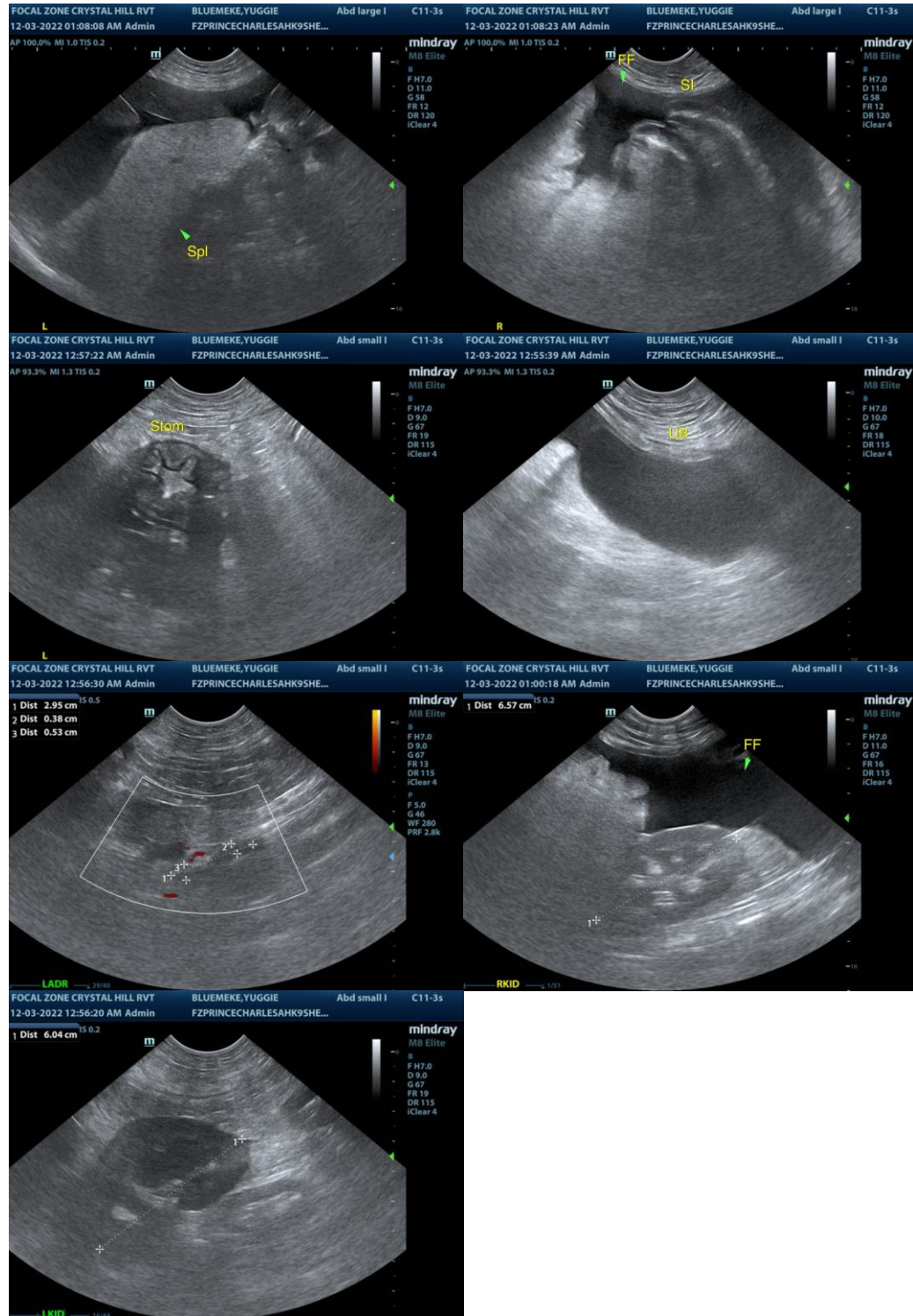
Dr. Momi

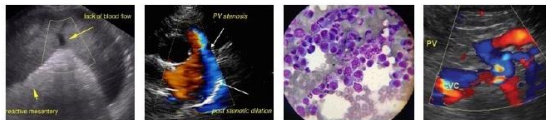
INVOICE

15580

DATE

12/2/22





PATIENT

Yuggie Bluemeke

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.

SPECIES

Canine

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.

BREED

Shep X

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)
info@SonoPath.com

SEX

MN

AGE

2 years

WEIGHT

46.4 kg

INTERPRETED BY

R. McKenzie Daniel,
DVM, DABVP

IMAGING PERFORMED BY

Crystal Hill

HOSPITAL NAME

Prince Charles AH

REFERRING VET

Dr. Momi

INVOICE

15580

DATE

12/2/22