



## PATIENT

Thor Muttik

## SPECIES

Feline

## BREED

DSH

## SEX

NM

## AGE

10 yrs, 8 mos

## WEIGHT

5.9 kgs

## PRESENTING CLINICAL SIGNS

AUS to further evaluate elevated LES and hyperbilirubinemia suspected secondary to hepatic lipidosis (Hx IBD vs GI LSA) and azotemia suspected secondary to dehydration. Hospitalized in the ER 6/13-6/16. Presented to ER in critical condition with a history of 1 week duration of anorexia, lethargy and vomiting. PE showed severe dehydration, hypovolemic shock, and jaundice. Managed supportively in hospital and placement of an E-tube. Azotemia resolved during hospitalization and LES remained elevated but starting to trend down.

ER discharge meds: Clavamox, Denamarin, Prednisolone, RC Liquid Recovery

Abnormal PE/Chem/CBC/UA Results: Prev AUS (SonoPath) 10/14/2024: GI pattern/thickening revealed mild uniform prominence of the gastric mucosa. Muscularis appeared to be subj hypertrophied & the intestinal submucosa was slightly irregular & thickened. Chronic IBD is a possibility, as well less likely to be an early neoplastic change, such as small cell lymphoma or a dry form of feline infectious peritonitis. ER diagnostics 6/13 -> 6/15 - Chem: Alb 5.4 H -> 3.3-n; ALP 306 H -> 230 H; ALT 505 H -> 287 H; Chol 236 H, Cr 2.0 H; Gluc 171 H -> 122-n; Phos 7.8 H, T. bili 3.9 H -> 2.3 H; TP 8.4 H, BUN 83.2 H - EPOC: pH 7.44 H -> 7.35-n; Cr 3.06 H -> 0.77-n, Lac 4.9 H -> 3.62 H; BUN 76 H -> 12-n - CBC: Hct 43.1%, mild stress leukogram; Plts 312-n - PT/PTT: 16.8s-n, 120.3 s-n - PCV/TS: 40% / 10 H -> 26% / 6.0; Icteric

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### *Urinary System*

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 2.0 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.

No evidence of pathology in the area of the aortic trifurcation.

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 pelvic dilation. The left kidney measured 4.1 cm in length. The right kidney measured 4.3 cm in length.

### *Adrenal Glands*

The left and right adrenal glands were overtly normal in size, position, and shape. The left adrenal gland measured 0.36 cm width and the right adrenal gland measured 0.35 cm width.

### *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. The spleen measured 0.69 cm width at the level of the mid-spleen.

## INTERPRETED BY

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

## IMAGING PERFORMED BY

Renee Trionfetti,  
VMD

## HOSPITAL NAME

Blue Pearl  
Wyomissing ER

## REFERRING VET

Blue Pearl  
Wyomissing ER

## INVOICE

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## DATE

6/17/26



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## *Liver/ Gallbladder*

The liver presented normal in size. The parenchyma of the liver was subjectively increased in echogenicity compared to the spleen and renal cortices. The echotexture of the liver parenchyma was uniform with a mild coarse echotexture. The capsule of the liver was symmetrical in margination. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was non-distended in size containing primarily anechoic content with minor gallbladder debris. The common bile duct was not definitively visualized.

## *Gastrointestinal*

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach was empty without evidence of retained ingesta or foreign material. Minor retained fluid was noted.

The small intestine presented intact generalized mildly thickened wall layering exhibiting altered wall layer ratio, variable between subjective mildly prominent duodenal mucosa and mildly thickened jejunum muscularis layers. The lumen of the small intestine was empty with no signs of ileus, obstruction, or foreign material.

The duodenum wall measured 0.35 cm width. The jejunum wall measured up to 0.31 cm width. The ileocolic wall measured 0.42 cm width.

Normal visible colon wall layers were present with generalized soft to non-formed fecal matter.

## *Pancreas*

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.

## *Free Abdomen*

No significant omental lymphadenopathy was visualized. Normal omental echogenicity was noted. No evidence of peritoneal effusion was present.

## ULTRASONOGRAPHIC FINDINGS

- Hepatopathy exhibiting parenchyma hyperechogenicity – inflammatory disease, lipidosis, or combination favored, mild potential for occult round cell hepatic neoplasia
- Mild gallbladder debris without post hepatic obstruction
- Normal pancreas
- Chronic enteropathy – chronic IBD or other inflammatory enteropathy probable given patient history, mild potential for low-grade intestinal round cell neoplasia

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Correlation with pending hepatic cytology is recommended. Empirical therapy for chronic IBD with potential for triaditis and lipidosis would be appropriate pending cytology. A GI panel to include PLI/TLI/Cobalamin/Folate is recommended. Sonographic reassessment or monitoring is indicated, given hepatopathy and small intestinal wall changes, if persistent hepatopathy, gastrointestinal signs, or weight loss. Biopsies may be required for a definitive diagnosis.



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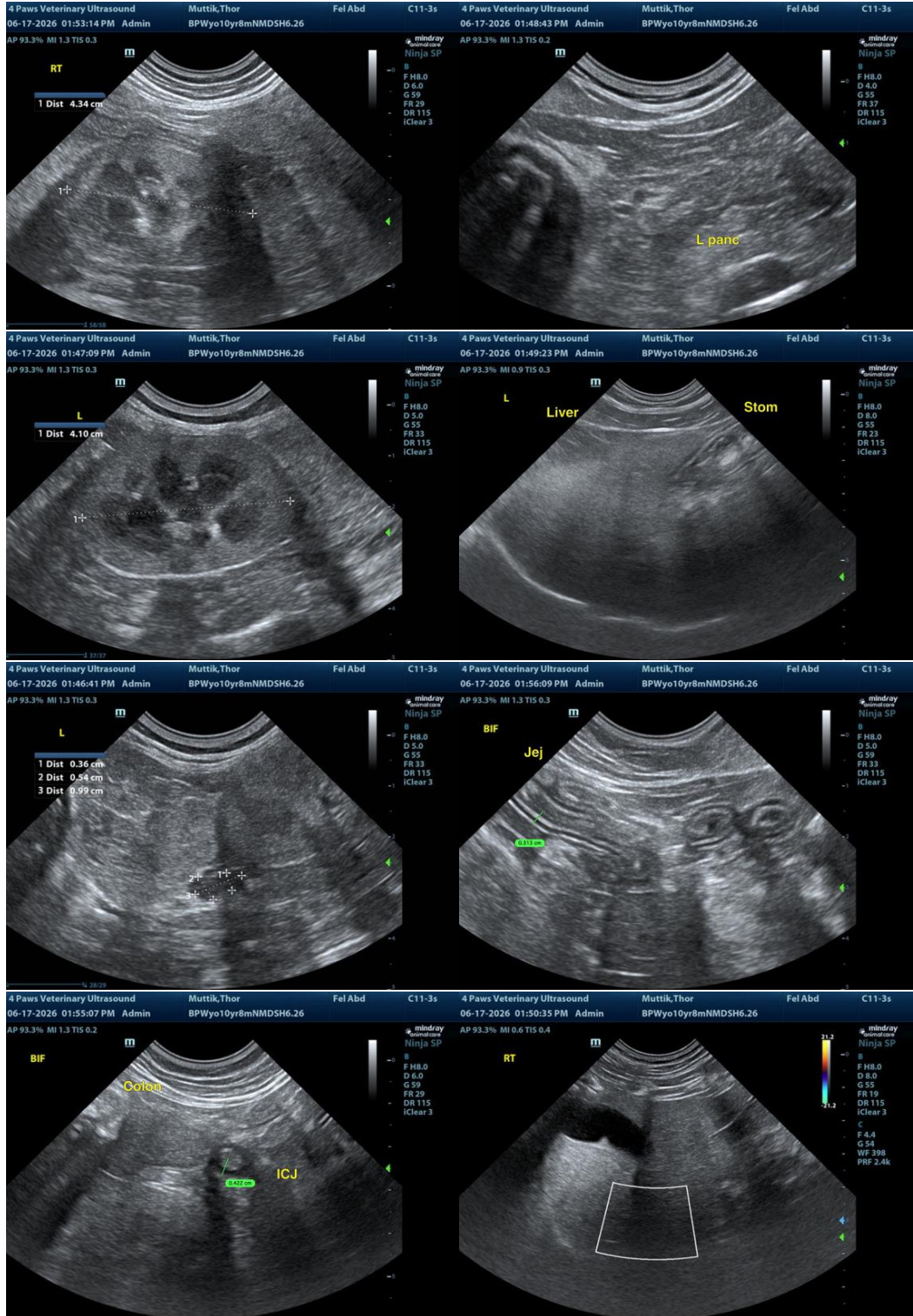
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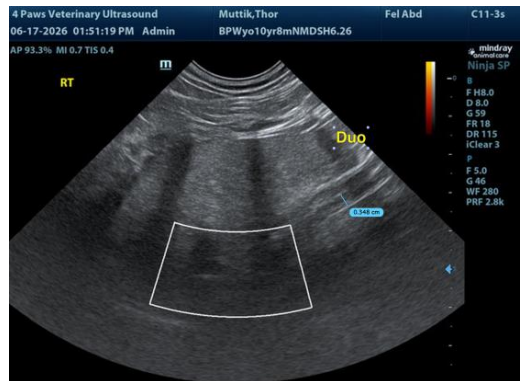
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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](mailto:info@sonopath.com)