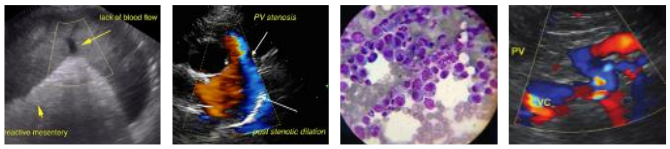
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™




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

**PATIENT**
Mittens Crowley

**SPECIES**
Feline

**BREED**
DLH

**SEX**
FS

**AGE**
15yr

**WEIGHT**
2.5kg

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

**IMAGING PERFORMED BY**
Dr. Callihan

**HOSPITAL NAME**
Pacific Crest Mobile Veterinary Service

**REFERRING VET**
Dr. Ingman

**INVOICE**
12875ag

**DATE**
02/03/2023

## PRESENTING CLINICAL SIGNS

Presented today for ultrasound for further evaluation of anemia and ongoing vomiting. Pt has spent most of her life as a barn cat, was adopted in Dec 2022 at 15yrs old when it was noted she was quite thin and had been discovered to have been trapped inside an office space for a couple days. She was found to be hyperthyroid and was started on methimazole; T4 is now technically within ref range at 3.4 This week was evaluated for vomiting, noted on in-house ultrasound by primary care to have appearance of delayed gastric emptying, possible thickening or mass effect in the pylorus region, and her HCT had dropped from. _____ in Dec to 20% yesterday. She has not had a recent urinalysis but has ongoing PU/PD Meds: Methimazole 2.5 mg transdermal in the a.m. and 5 mg p.m. Ondansetron 2 mg p.o. q12h prn vomiting PE abnormalities: -BCS 3/9, BW 2.5kg Chems: -BUN sl elev (41), Cr normal 1.2, SDMA normal (12) -remaining chems normal CBC: -HCT 23.9% NON regenerative (33% on 1/4/20223 -normal WBC count and distribution other than marginally high neut (11.3)

Abnormal PE/Chem/CBC/UA Results: PE abnormalities: -BCS 3/9, BW 2.5kg Chems: -BUN sl elev (41), Cr normal 1.2, SDMA normal (12) -remaining chems normal CBC: -HCT 23.9% NON regenerative (33% on 1/4/20223 -normal WBC count and distribution other than marginally high neut (11.3)

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### *Urinary System*

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 2 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 size and asymmetrical margination were present in the kidneys. A normal 1:3 cortex / medulla ratio was maintained. The medulla and cortices were uniform in texture with some increased echogenicity and moderate to marked loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. Pinpoint dystrophic medullary mineral was present. The left kidney measured 3.7 cm in length. The right kidney measured 3.7 cm in length.

The area of the aortic trifurcation was free of pathology.

### *Adrenal Glands*

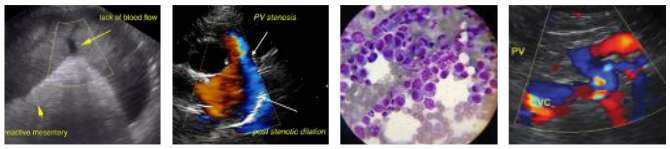
The left adrenal gland was not definitively visualized. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.32 cm width.

### *Spleen*

The spleen exhibited normal size and contour with generalized parenchyma heterogeneity. Focal to intermittent non-disruptive well demarcated hyperechoic nodules were present, an example measured 0.48 cm in diameter. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis. The spleen measured 0.64 cm in width at the level of the hilus.

### *Liver/Gallbladder*

The liver presented 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 common bile duct was mildly




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

**PATIENT**

Mittens Crowley

**SPECIES**

Feline

**BREED**

DLH

**SEX**

FS

**AGE**

15yr

**WEIGHT**

2.5kg

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Dr. Callihan

**HOSPITAL NAME**

Pacific Crest Mobile Veterinary Service

**REFERRING VET**

Dr. Ingman

**INVOICE**

12875ag

**DATE**

02/03/2023

dilated and tortuous without overt post hepatic obstruction. The common bile duct measured 0.18 cm diameter.

### *Gastrointestinal*

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach contained minor retained pyloric chyme with no signs of ileus, obstruction or foreign material.

A segmental subjective mild jejunal mural mass was present in the mid caudal abdomen measuring ~ 2-3 cm in length with up to 0.6 cm wall width. The remainder of the small intestine presented intact wall layering with a primarily maintained 1:3 muscularis/mucosa ratio. The lumen of the small intestine contained mild retained chyme likely proximal to the segmental jejunal mural mass. No evidence of obstructive pattern. The normal appearing jejunum wall measured 0.22 cm width. The ileocolic wall measured 0.41 cm width.

Associated mild homogenous mesenteric lymphadenopathy around the jejunal mural mass and within the mid abdomen was present, an example measured 1.0 cm x 0.44 cm.

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

### *Pancreas*

The left pancreatic limb was mildly prominent in size with mild capsule asymmetry and non-homogenous hypoechoic parenchyma. Minor pancreatic duct dilation was present.

### *Free Abdomen*

Mild volume peritoneal effusion was present.

## ULTRASONOGRAPHIC FINDINGS

- Segmental jejunal mural mass with associated regional mild mesenteric lymphadenopathy
- Mild volume peritoneal free fluid
- Possible concurrent chronic pancreatitis
- Bilateral moderate to marked degenerative renal changes with dystrophic medullary mineral
- Non-obstructive proximal common bile duct dilation-suspect age-related change

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

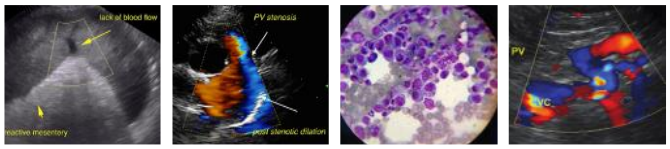
Etiologies for the jejunal mural mass include inflammatory, granulomatous (dry FIP) disease or neoplastic with associated mesenteric hyperplasia, reactive lymphadenitis or very early neoplastic/metastatic lymphadenopathy.

Assuming normal clotting status, a jejunal mural mass FNA for screening cytology could be considered for further assessment as well as effusion analysis +/- C/S if evidence of inflammatory cells.

Further renal staging to include urine C/S and protein: creatinine ratio on sterile urine sample may be considered. A GI panel to include PLI/TLI/Cobalamin/Folate is recommended.

Jejunal and lymphatic biopsies are likely required for a definitive diagnosis.

SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



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

**PATIENT**

Mittens Crowley

**SPECIES**

Feline

**BREED**

DLH

**SEX**

FS

**AGE**

15yr

**WEIGHT**

2.5kg

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Dr. Callihan

**HOSPITAL NAME**

Pacific Crest Mobile Veterinary Service

**REFERRING VET**

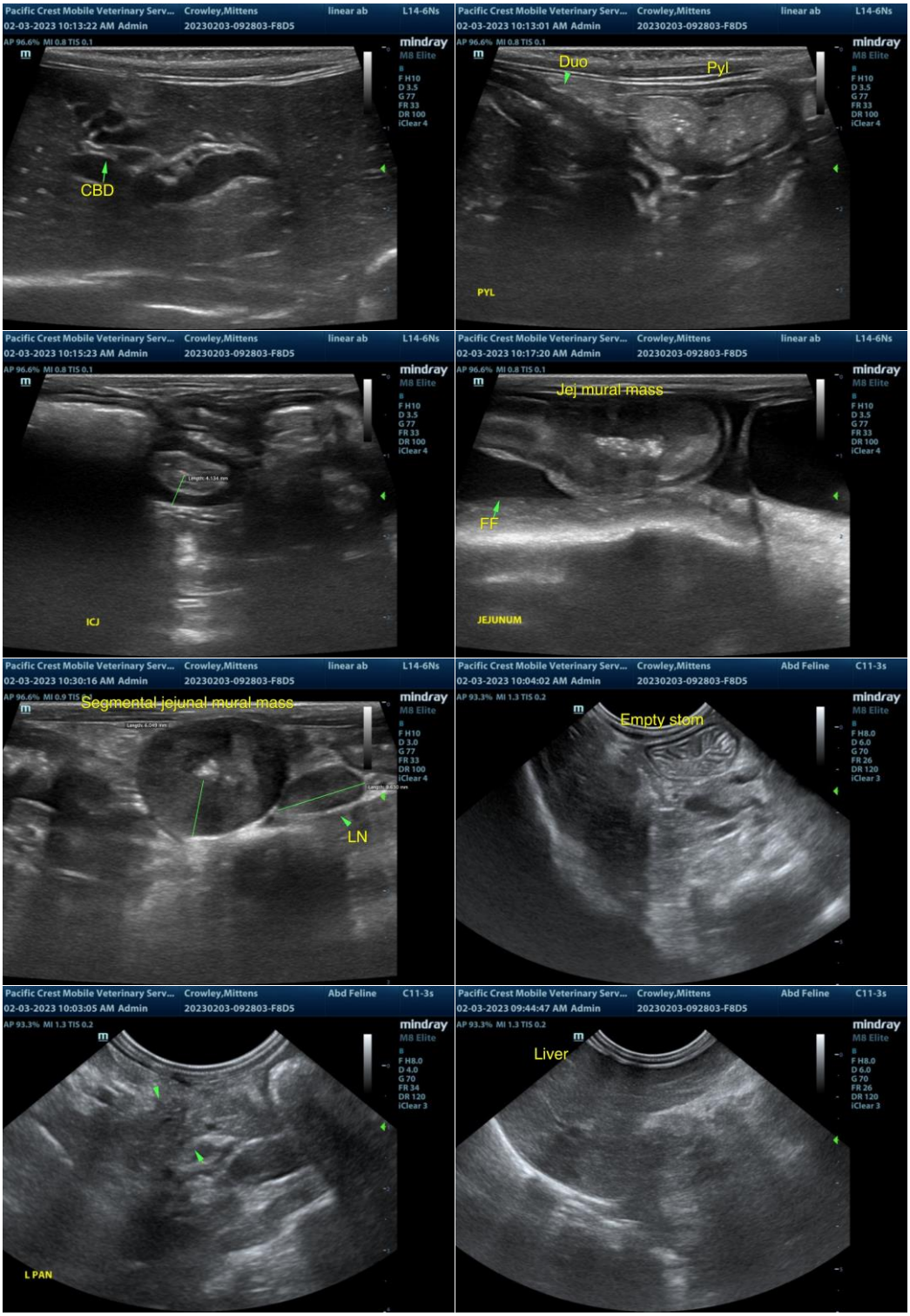
Dr. Ingman

**INVOICE**

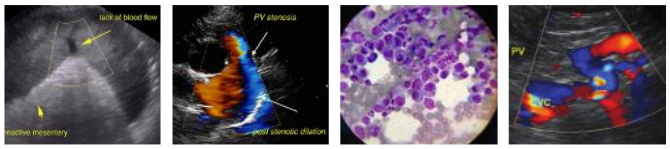
12875ag

**DATE**

02/03/2023



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



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

**PATIENT**

Mittens Crowley

**SPECIES**

Feline

**BREED**

DLH

**SEX**

FS

**AGE**

15yr

**WEIGHT**

2.5kg

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Dr. Callihan

**HOSPITAL NAME**

Pacific Crest Mobile Veterinary Service

**REFERRING VET**

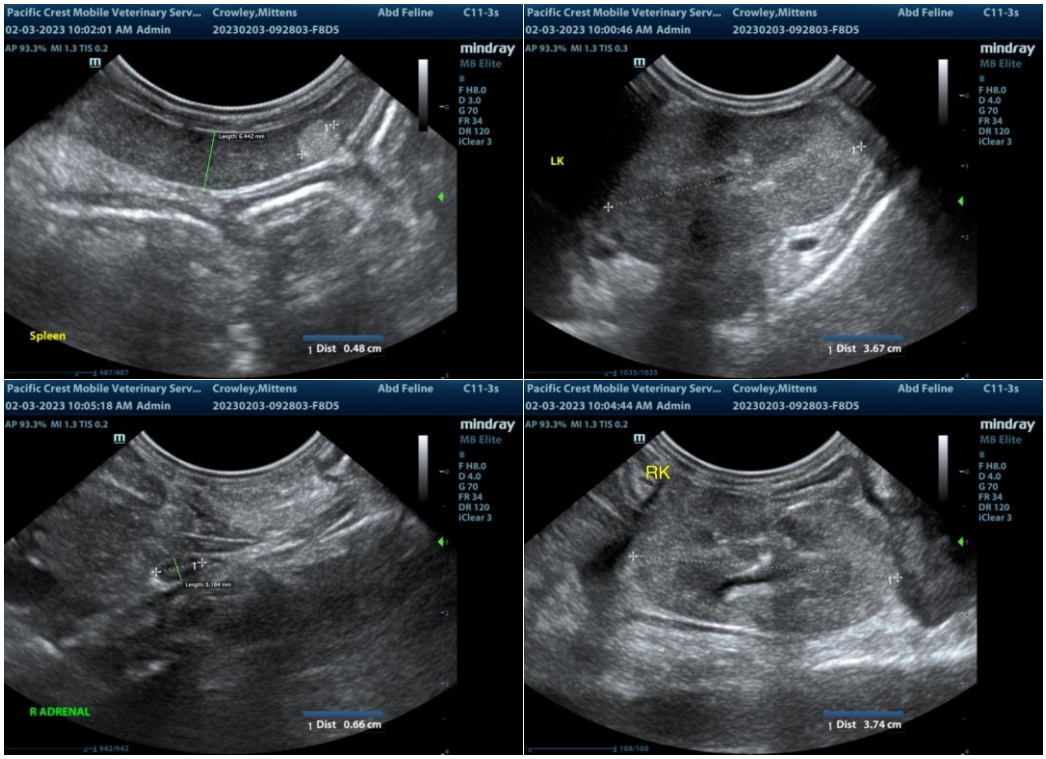
Dr. Ingman

**INVOICE**

12875ag

**DATE**

02/03/2023




**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)**
mac.daniel@sonopath.com