



**PATIENT**

Winnie Brown

**PRESENTING CLINICAL SIGNS**

Was seen at ER clinic last night for 24 hour duration of vomiting. Diagnosed with pancreatitis. Owner declined hospitalization at that time and elected at home care.

**SPECIES**

Canine

Abnormal PE/Chem/CBC/UA Results: Severe abdominal pain Depressed attitude HR - 80 7% dehydrated 3 sec capillary refill time T - 101.4 RDVM bloods: HCT 61.9; Glucose - 209; ALP - 814; Lipase = 5529; amylase - >2500; CL - 102; cPL - abnormal Cerenia administered last night along with SQ fluids. Metronidazole dispensed at that time Has continued vomiting despite cerenia

**BREED**

Min Pin

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

**SEX**

Spayed Female

The urinary bladder is moderately distended with anechoic urine. The Bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

**AGE**

7 Years

The left kidney has a normal shape and size (3.92 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**WEIGHT**

17.9 Pounds

The right kidney has a normal shape and size (4.27 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**INTERPRETED BY**

Kathleen Sennello DVM,  
MS, Diplomate ACVIM  
(Small Animal Internal  
Medicine)

**Adrenal Glands**

The region of left adrenal (Cranial to left renal artery) is unremarkable but the adrenal is not distinctly visualized. No evidence of a mass effect.

The region of the right adrenal (between right cranial kidney and vena cava) is unremarkable, but the adrenal is not distinctly visualized. No evidence of a mass effect.

**IMAGING PERFORMED BY**

Dr. Adrienne Waffle

**Spleen**

The spleen is subjectively normal in size, echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

**HOSPITAL NAME**

Torch Lake VC

**Liver**

The liver is large in size, and normal in echogenicity with smooth peripheral margins. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed.

**REFERRING VET**

Dr. Adrienne Waffle

The gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are mild and primarily anechoic. The cystic and common bile ducts are normal/not visible.

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***Gastrointestinal***

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.7cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layers is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

**SPECIES**

Canine

The visualized areas of duodenum, jejunum and ileum have a relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. The duodenum measured as normal (between 0.3-0.5cm in wall thickness) and the jejunum measured as normal (between 0.2-0.47cm.)

**BREED**

Min Pin

Visualized peristalsis appears appropriate. The proximal duodenum appears focally mildly thickened, associated with the inflamed pancreas.

**SEX**

Spayed Female

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Sections of colon are visualized with formed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

***Pancreas***

**AGE**

7 Years

The pancreas is large and hypoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is evidence of regional mesenteric inflammation. Consistent with moderate pancreatitis.

**WEIGHT**

17.9 Pounds

***Free Abdomen***

There is scant free abdominal fluid around the pancreas. There is no lymphadenopathy noted. The omentum is severely hyperechoic surrounding the pancreas.

**ULTRASONOGRAPHIC FINDINGS**

**INTERPRETED BY**

Kathleen Sennello DVM,  
MS, Diplomate ACVIM  
(Small Animal Internal  
Medicine)

- Large, hypoechoic pancreas surrounded by hyperechoic mesentery and scant free fluid – The pancreatic changes are most consistent with moderate/severe pancreatitis/pancreatic inflammation. Recommend fPLI testing and continued monitoring for improvement or possible development of a pancreatic abscess. Consider fine needle aspirate if not improving.
- Large, heterogeneous liver – The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy.

**IMAGING PERFORMED BY**

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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**HOSPITAL NAME**

Torch Lake VC

The pancreas is prominent, inflamed, enlarged, and surrounded by hyperechoic mesentery and a small amount of free fluid. These findings are most consistent with significant pancreatic disease. Recommend aggressive treatment for pancreatitis while continuing to monitor for the possible development of any focal lesions (abscesses, cysts, etc.). Recommend monitoring blood glucose levels to ensure this is not a borderline diabetic. Recommend lifelong change to an ultra low fat diet.

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PERFORMED BY**

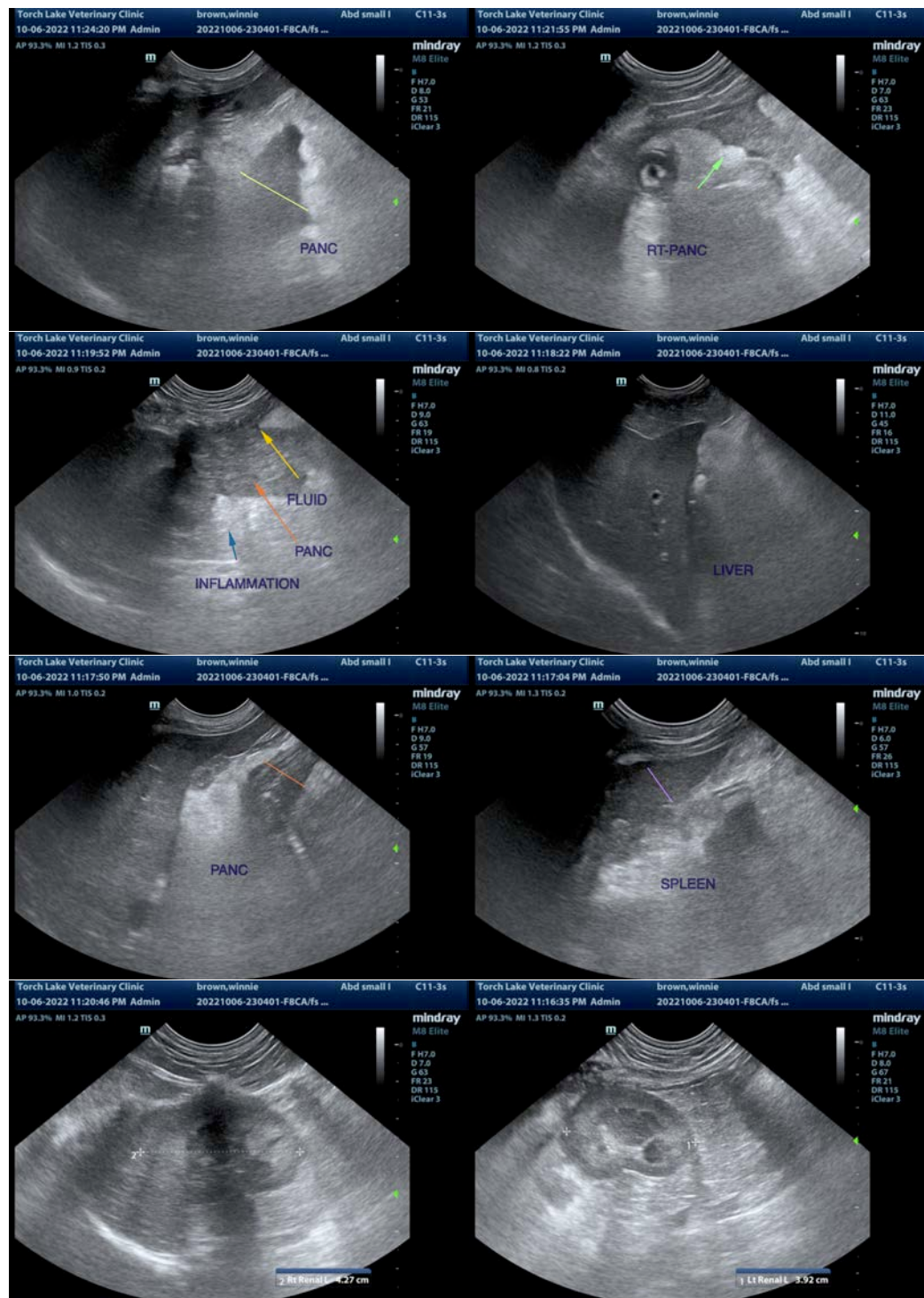
Dr. Adrienne Waffle

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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.

**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.

Kathleen Sennello DVM,MS, Diplomate ACVIM (Small animal Internal Medicine)

**BREED**

Min Pin

kathleen.sennello@sonopath.com

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Spayed Female

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