



## PATIENT

Piper Mulherin

## SPECIES

Canine

## BREED

Mixed

## SEX

Spayed Female

## AGE

12

## WEIGHT

30 pounds

## INTERPRETED BY

Kim Radway, DVM,  
DABVP (Canine/  
Feline)

## IMAGING PERFORMED BY

Michael Schacher

## HOSPITAL NAME

Emergency  
Veterinarians of Idaho  
LLC

## REFERRING VET

Dr. Juli Sorenson

## INVOICE

14734

## DATE

03/30/26

## PRESENTING CLINICAL SIGNS

- Vomiting and diarrhea for 5 days and 1 day respectively
- X-rays revealed free fluid within the abdomen and material in the stomach/duodenum (non-distended)

Abnormal PE/Chem/CBC/UA Results: CPL too high to read, amylase 3700, mild ALP and ALT increase

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### Urinary System

The **urinary bladder**, trigone and pelvic urethra presented with normal wall thicknesses with normal tone. No uroliths or masses were noted in the lumen of the bladder. No evidence of inflammatory or neoplastic changes were noted. The ureters were not visible and considered normal. There was an anechoic background to the urine, which contained a moderate amount of suspended hyperechoic cellular debris.

The **kidneys** revealed normal size, corticomedullary definition and ratio with the cortex being 1/3 of medulla. Medullary echogenicity differed distinctly from that of the cortex and no evidence of dilation could be seen. The renal pelvic diverticuli were distinct in character. The capsules were acceptably uniform without dramatic irregularities. The left kidney measured 4.45 cm in length. The right kidney measured 4.17 cm in length.

### Adrenal Glands

Both **adrenal glands** were visualized and recognized as having normal shape, size, position and echogenicity for this breed. The phrenic vasculature, glandular echogenicity and detail were acceptable. The left adrenal gland measured 1.79 cm x 0.50 cm x 0.58 cm. The right adrenal gland measured 1.6 cm x 0.36 cm x 0.38 cm.

### Spleen

The **spleen** presented with a smooth homogeneous parenchyma hyperechoic to liver and kidney. The capsule was smooth and linear in its contour. The splenic vasculature demonstrated normal volume without signs of congestion, significant contraction, or thrombosis.

### Liver

The liver was found to have an overall heterogeneous and mildly coarse echotexture throughout the hepatic parenchyma, but no evidence of defined or discrete masses or nodules were present. The gallbladder revealed a mild degree of suspended, slightly hyperechoic material within the gallbladder lumen.

### Gastrointestinal

The **gastrointestinal tract** revealed a stomach and intestine free of stasis, of normal wall thickness, acceptable curvilinear mural detail, and peristaltic activity. There was a small to moderate amount of gas and hyperechoic distal shadowing contents within the stomach lumen. No obstructive or overt infiltrative disease was noted. No abnormal lymphatic activity was noted, and the abdomen was free of gastrointestinal masses. There was one image that showed two discrete hyperechoic distal



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shadowing regions of intestinal ingesta within the lumen of the small intestinal tract. There was no evidence of an obstructive pattern or dilated bowel seen within the images provided.

### *Pancreas*

The pancreas was found to have an overall enlarged and hypoechoic appearance with mild irregularity along the pancreatic capsular contour. There was surrounding hyperechoic omentum and abdominal effusion noted. There were no masses or nodules present within the pancreas.

### *Free Abdomen*

There was a small to moderate volume of cellular effusion noted within the abdomen.

## ULTRASONOGRAPHIC FINDINGS

- Hyperechoic debris within the urine.
- Hypoechoic and enlarged pancreas.
- Hyperechoic omentum especially in the cranial abdomen surrounding the pancreas.
- Small/moderate volume of cellular abdominal effusion.
- Two hypoechoic distal shadowing regions of intestinal contents within the small bowel.

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

This patient was found to have a supportive pattern for the presence of acute pancreatitis with a hypoechoic pancreas surrounded by hyperechoic omentum and a moderate volume of cellular effusion. An abdominocentesis to collect a sample of the abdominal effusion is recommended in order to better characterize the effusion and determine if there is support for underlying peritonitis. It is recommended to treat this patient aggressively for acute pancreatitis, including IV fluids, pain management, Cerenia, feeding a low-fat bland diet, and giving daily probiotics. Antibiotic therapy can be added depending on the results from the abdominocentesis and evaluation of the abdominal effusion. Since there was a single image showing hyperechoic contents within the intestinal lumen as well as hyperechoic distal shadowing material within the stomach lumen, it is recommended to consider a recheck abdominal ultrasound in 12 to 24 hours to assess the response to aggressive therapy for acute pancreatitis and to further confirm that there is no development of an obstructive pattern secondary to the presence of the distal shadowing material within the gastrointestinal tract.

A cystocentesis urine sample is recommended in order to submit a urinalysis and urine culture to determine if there is any support for an underlying urinary tract infection.



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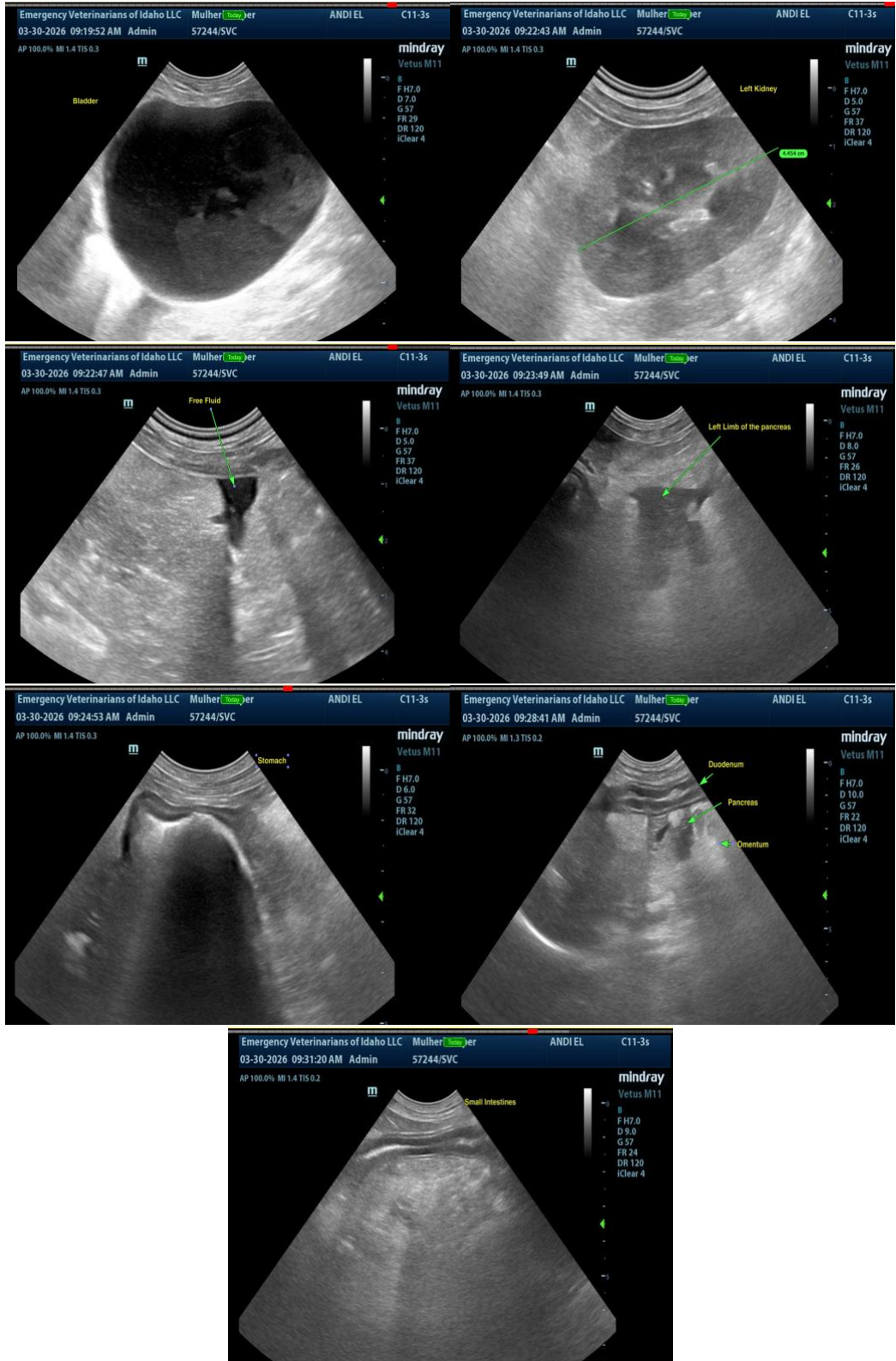
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Kim Radway, DVM, DABVP (Canine/ Feline)

[info@SonoPath.com](mailto:info@SonoPath.com)