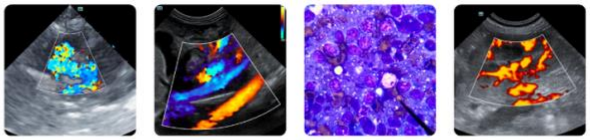


PATIENT

Reis Kieffer

SPECIES

Canine

BREED

Mini Schnauzer

SEX

Spayed Female

AGE

11 Years

WEIGHT

19.28 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Jocelyn Smith, CVT

HOSPITAL NAME

Annville-Cleona VA

REFERRING VET

Dr. Bruce Keck

INVOICE

35954

DATE

12/18/25

PRESENTING CLINICAL SIGNS

History: Vomiting and diarrhea since Sunday night - Increased water consumption over past 1.5 months - Abnormal behavior: had accidents in bed/living room Monday morning Dehydration present Tense abdomen on palpation Hospitalized 12/17/25 on IV fluids with Cerenia & Zofran, Buprenorphine for pain 12/19/25 - Ate 1/2 ration at 7 AM; NO Vomiting or diarrhea. Lethargic. T=100.5, hydration improved.

Abnormal PE/Chem/CBC/UA Results: * Complete blood count = WNL * Chemistry screen = WNL: except ALK PHOS = 276 * SNAP lipase test = NEG * Three-view abdominal radiographs - caudally displaced spleen; SI stacking without obvious gas pattern suggestive of a FB.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is moderately distended with anechoic urine. The bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2.0 cm) appear normal with no evidence of wall thickening, mucosal irregularities, or masses. In the dependent portion of the urinary bladder, there is a hyperechoic foci most consistent with a small stone (numerous calculi are visualized on the radiographs submitted. These are not clearly visualized, possibly in the urethra or super imposed.). The stone visualized measures approximately 0.3 cm.

The left kidney has a normal shape and size (5.36 cm). Overall echogenicity is slightly hyperechoic with decreased 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.

The right kidney has a normal shape and size (4.54 cm). Overall echogenicity is slightly hyperechoic with decreased 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. Occasional pinpoint cortical mineralizations were noted.

Adrenal Glands

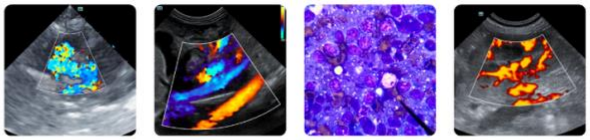
The region of left adrenal (Cranial to left renal artery) is unremarkable but the adrenal is not distinctly visualized. No evidence of a mass effect. Full colon shadows over the region of the left adrenal, impairing visualization of this region.

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.

Spleen

The spleen is subjectively normal in size (1.05 cm), 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.

Liver



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The liver is subjectively large in size and rounded. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. In the mid left region of the liver, there are two hypoechoic mass effects visualized, measuring 2.33 cm x 2.67 cm and 1.89 cm x 1.98 cm.

The gall bladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. There is a moderate amount of non-organized echogenic debris. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

The stomach contains moderate fluid and shadowing ingesta. It measures at a normal thickness of <0.7 cm 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. Shadowing from the ingesta and fluid interferes with full evaluation of the stomach and some areas of the cranial abdomen- the pylorus is not clearly visualized.

Most areas of duodenum, jejunum and ileum have a relatively uniform diameter with minimal to moderate fluid and gas distension. Wall thickness is normal. Bowel loops maintain distinct wall layering with the typical 1:3 muscularis: mucosa layer ratio. The duodenum measured as normal (0.48 cm in wall thickness) and the jejunum measured as normal (0.29 cm) Visualized peristalsis appears appropriate. The small intestine appears somewhat bunched together, but there is uniform fluid and gas distention. No focal lesion is observed. Findings could be consistent with generalized ileus/gastroenteritis.

The descending colon contains areas distended with hard shadowing fecal material. There is no observed focal or generalized colon wall thickening or loss of layering.

Pancreas

The pancreas is prominent and hypoechoic in the left limb as compared to the surrounding isoechoic mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

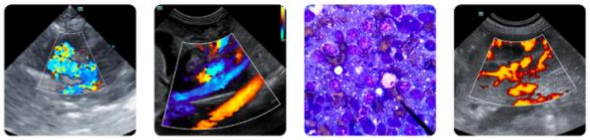
Free Abdomen

Evaluation of the peritoneal cavity did not reveal any evidence of effusion, or subjective lymphadenomegaly. The medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of normal uniform echogenicity.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Dependent mineralization/stones visualized in the urinary bladder- Correlate with radiographs, urinalysis, and culture.
- Pancreatic changes consistent with chronic pancreatic remodeling and chronic active pancreatitis.
- Large rounded heterogenous liver with two hypoechoic mass effects- The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular



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hyperplasia, inflammatory/immune-mediated disease, infiltrative neoplasia (less likely) or other hepatopathy. The hypoechoic lesions could represent adenomas, large regenerative nodules, carcinomas, etc.

Secondary Findings

- Moderate gallbladder debris- The significance of the aggregated gallbladder debris is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting but seems unlikely to be causing a current issue. Recommend continued monitoring.
- Age-related changes visualized associated with both kidneys.
- Moderately fluid and gas distended stomach and small intestine- Findings are suggestive of ileus and gastroenteritis. A focal partially obstructive lesion cannot be ruled out.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Visualization in the region of the cranial abdomen/stomach and the small intestine is somewhat limited due to shadowing from the stomach and shadowing from stool in the colon. The small bowel appears somewhat bunched but has a uniform population of mild fluid and gas distended bowel, suggestive of ileus and gastroenteritis. Recommend a more prolonged fast and treatment for gastroenteritis. Correlate with radiographs. If symptoms are persistent, consider repeat imaging or if your clinical suspicion is very high for foreign material, even an explore to further evaluate and obtain biopsies. No definitive focal lesion is observed on today's exam, but this cannot be ruled out.

The left limb of the pancreas is somewhat prominent, consistent with pancreatic remodeling, but some active pancreatitis may also be present. Correlate with a PLI level and consider concurrent treatment for pancreatitis.

The liver is large and heterogenous with two, somewhat poorly defined, hypoechoic mass lesions. If a safe window for sampling is available, consider fine needle aspirate. Otherwise, a contrast CT scan could be considered in the future to further evaluate for possible surgical evaluation. Additionally, these could be followed with ultrasound to determine if they appear to be changing rapidly, etc.

There is some dependent mineralization visualized in the urinary bladder most consistent with a bladder stone. Radiographs show numerous small bladder stones. Correlate with urinalysis and culture results. These may be small enough to pass but this is uncertain.

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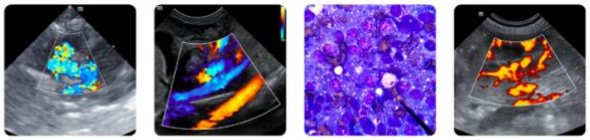

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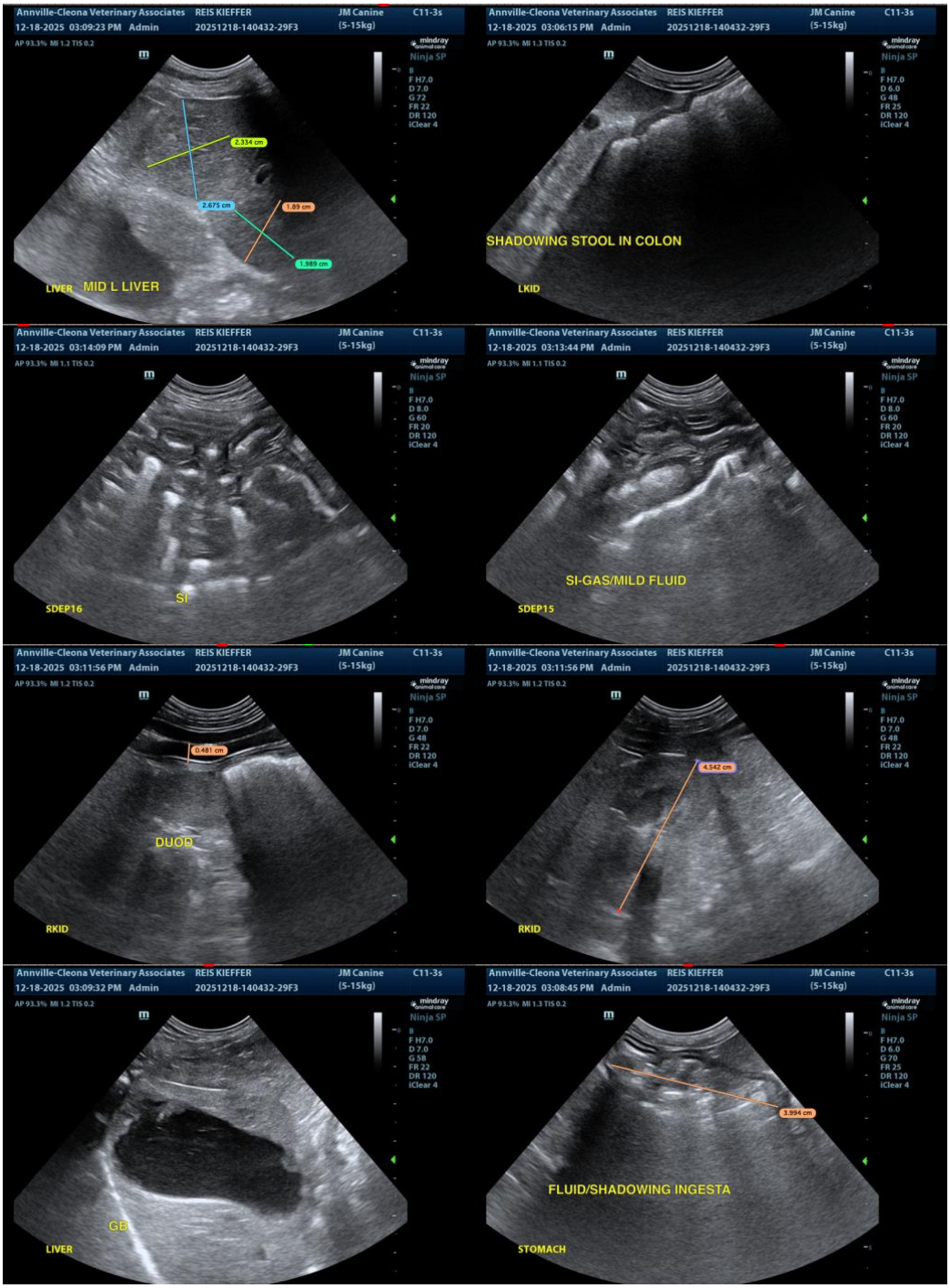

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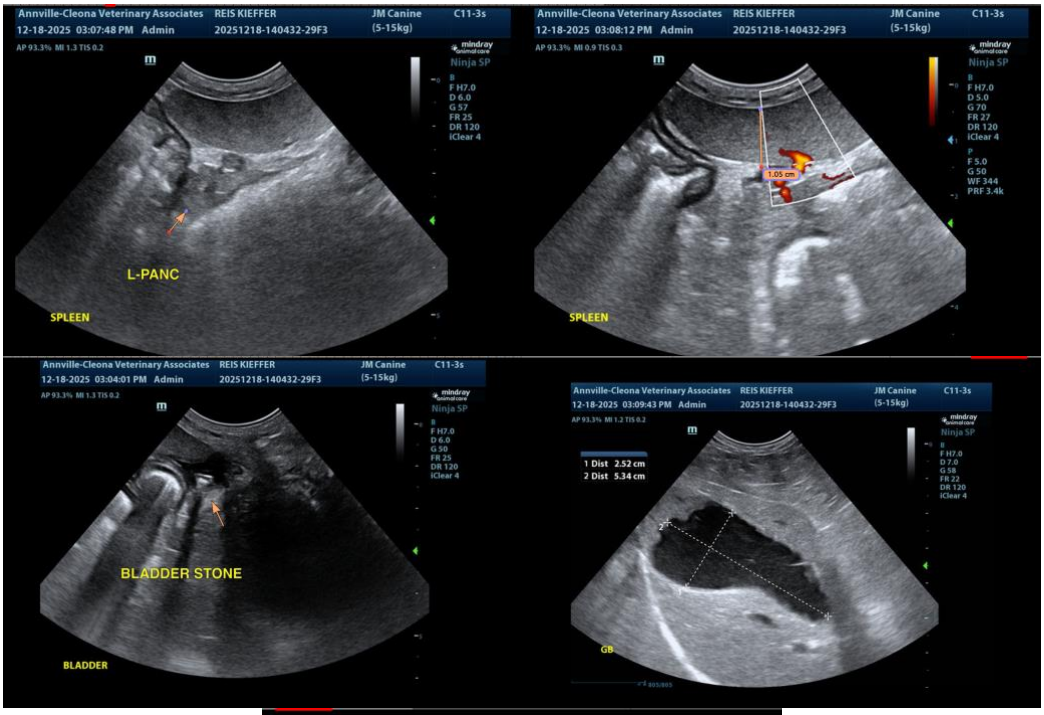

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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

info@sonopath.com