



**DATE PRESENTING CLINICAL SIGNS**

5/13/26 Patient History: Cece presents for follow-up care after being diagnosed with pancreatitis yesterday at Kearney Animal Hospital

**PATIENT** Current Medications: Cerenia, Protonix, Ondansetron. Buprenorphine, Panoquell.  
Labwork Results: Labwork attached.

Cece Brocato Date of Previous IntraPet Ultrasound: No previous.  
Sedation: Not required to complete full diagnostic ultrasound.

**SPECIES** Stat Report: STAT requested.  
Imaging Performed by: Rachel Brillhart, RDMS.

Canine

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**BREED**

**Urinary System**

Chihuahua

Urinary bladder is adequately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

**SEX**

Spayed Female

Kidneys are bilaterally irregular and diffusely echogenic with decreased corticomedullary distinction and poor visualization of internal architecture. No pyelectasia is observed. The left kidney is normal in size, measuring 3.24 cm. The right kidney is small in size, measuring 2.85 cm. Punctate nonobstructive nephroliths are noted bilaterally.

**AGE**

5/12/14

**WEIGHT**

**Adrenal Glands**

7.1 Pounds

Left adrenal gland is normal in size (0.54 cm at cranial pole and 0.53 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

Right adrenal gland is normal in size (0.47 cm at cranial pole and 0.39 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

**HOSPITAL NAME**

**Spleen**

Animal Emergency  
Hospital

Spleen is generally normal in size and shape with a smooth capsular contour. Parenchyma is diffusely nodular in appearance characterized by small discrete hypoechoic nodules. Splenic vasculature appears normal.

**REFERRING VET**

**Liver**

Dr. Shannahan

Liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

**INVOICE**

37104

Gallbladder is moderately distended with anechoic bile as well as suspended and gravity dependent echogenic debris. The wall is smooth without visible thickening. There is no evidence of cystic or CBD dilation. There is no evidence of effusion or inflammation.

**Gastrointestinal**

The visible stomach wall is normal in thickness and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

The visible small intestine demonstrates areas of moderate to severely thick muscularis layer relative to mucosa (disruption of the normal 1:3 muscularis:mucosa ratio). Small intestinal submucosa is slightly irregular, thick and hyperechoic, without evident loss of layering appreciated. The lumen of the small intestine is empty with no evidence of obstruction or foreign material.

The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

### ***Pancreas***

The pancreas that is observed appears appropriately isoechoic to surrounding omental fat. Visible capsule is smooth and normal in contour. Visible pancreatic parenchyma is homogenous and unremarkable. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

### ***Free Abdomen***

There is no visible free peritoneal effusion noted in these images.

There is no apparent pathologic lymphadenopathy noted in these images.

## **ULTRASONOGRAPHIC FINDINGS**

- Moderate inflammatory bowel disease pattern- Thick muscularis has been reported with infiltrative bowel disease including both benign inflammatory disease as well as infiltrative neoplasia such as lymphoma. No loss of layering or distinct characteristics of malignancy are present. Therefore, differentials cannot be further ranked without tissue sampling.
- Splenic micronodular hyperplasia pattern- This nodular change is often associated with benign aging nodular hyperplasia. Infiltrative neoplasia, however, including both early hemangiosarcoma as well as round cell neoplasia cannot be ruled out.
- Mild to moderate gallbladder debris- Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness. Cholecystic debris is not necessarily related to hepatobiliary disease. Echogenic bile is most commonly an incidental finding in dogs and should be interpreted in combination with clinical signs such as nausea, inappetence, cranial abdominal discomfort and/or laboratory changes such as increased ALP and/or increased Tbili.
- Mild to moderate bilateral chronic kidney disease changes most visibly significant in the right kidney with punctate nonobstructive nephroliths also bilaterally.

## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

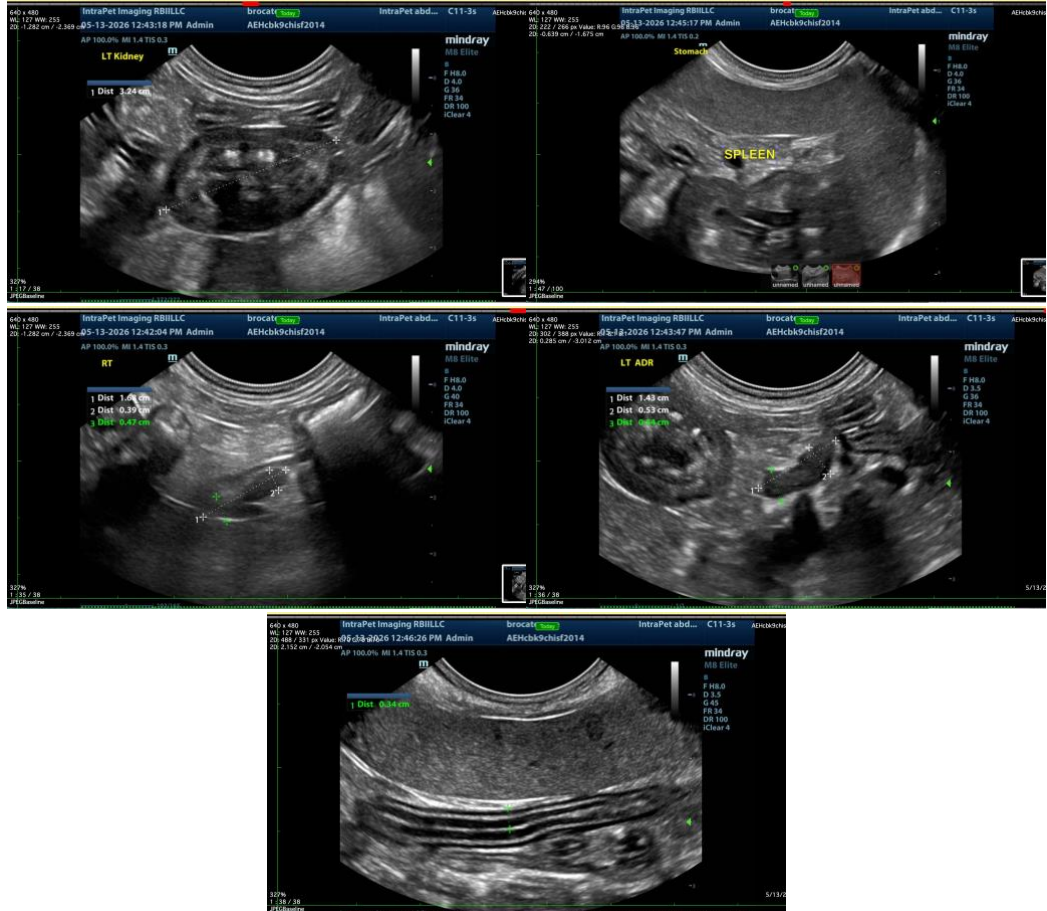
- If not recently evaluated, a general metabolic health screen (CBC, chemistry panel with electrolytes and urinalysis) is recommended.
- A routine fecal/Giardia exam is recommended if not recently evaluated.

- A gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory is recommended for further evaluation of GI and pancreatic function.
- A fecal enteropathogen PCR panel to Texas A&M GI Laboratory could be considered for further evaluation of possible infectious disease. Contact lab for recommendations on how long to discontinue antibiotics (if indicated) prior to obtaining a stool sample for submission.
- A baseline cortisol is recommended. If baseline cortisol is less than 2, a full ACTH stimulation test is recommended to rule out hypoadrenocorticism.

In the meantime:

- Supportive/symptomatic medical management of clinical signs is recommended, including anti-emetics, gastroprotectants (+/- sucralfate, especially with any history of hematemesis), an appetite stimulant and fluid therapy if indicated, etc.
- Additionally, empirical deworming with a 5-day course of Panacur is recommended.
- A full course of empirical Helicobacter triple therapy could be considered
- A probiotic, such as visbiome or proviable, may be helpful.
- Finally, if tolerated, a transition in diet could be considered, based on trial-and-error response with some options to consider including a gastrointestinal biome diet vs a hydrolyzed protein diet (sometimes several trials with different brands are necessary) vs an easy to digest, bland or low-fat diet vs other.
- Ultimately, if clinical signs persist, biopsies of the GI tract, being sure to include ileum, if possible, may be necessary for a definitive diagnosis and to further guide medical management.





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.

**Beth Johnson, DVM DACVIM**

info@sonopath.com