

**DATE**

7/5/22

**PRESENTING CLINICAL SIGNS**

Acute onset of vomiting and diarrhea; not eating owner gave 1/2 of the normal insulin around 9:30-10am- normally gets insulin around 7:30am not aware of getting into anything is not a known eater of things no change in diet eats three times a day due to GI issues and will vomit with only 2x a day feeding history of seizures and is on keppra does not do well with freestyle gets 7units of vetsulin BID gets 1/2 of 250mg Ursodiol SID(am) galliprant 20mg PO SID ( am) levetriacetam 250mg PO TID

**PATIENT**

Roxy Kuzyk

Current Medications: Ampicillin, Entyce, Denamarin, Ondansetron, Ursodiol, Buprenorphine, Keppra, Vetsulin, Cerenia, Protonix.

**SPECIES**

Canine

Lab Results: See attached.

Radiographs: decreased detail in the mid to caudal abdomen enlargement of the liver.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

**BREED**

Imaging Performed By: Rachel Brillhart, RDMS.

Miniature Schnauzer

**SEX**

Spayed Female

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****Urinary System**

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.

**AGE**

7/3/13

Kidneys are overall normal in size and shape with smooth peripheral margination. A normal 1:3 cortex to medulla ratio is maintained. The medulla and cortices are uniform in texture with some mild increased cortical echogenicity and mild loss of corticomedullary distinction, expected in this age patient. There is no evidence of pyelectasia, mineral or infarcts observed. The left kidney measured 5.83 cm and the right kidney measured 5.55 cm.

**WEIGHT**

18.6 lbs

**INTERPRETED BY**Beth Johnson, DVM  
DACVIM**Adrenal Glands**

Left adrenal gland is normal in size (2.37 cm long, 0.7 cm at cranial pole and 0.8 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

**HOSPITAL NAME**Animal Emergency  
Hospital

Right adrenal gland is normal in size (2.27 cm long, 0.7 cm at cranial pole and 0.61 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

**REFERRING VET**

Dr. Willer

**Spleen**

Spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). No focal nodules or masses are observed. Splenic vasculature appears normal.

**INVOICE**

31481

**Liver**

Liver is subjectively enlarged with mildly irregular margins. Parenchyma is heterogenous characterized by multiple poorly defined hypoechoic nodules within otherwise hyperechoic liver parenchyma. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is mildly overdistended with a moderate amount of non-dependent, mildly aggregated/inspissated sludge. Hypo to anechoic cystic areas are noted between the gallbladder sludge and luminal wall. The wall is otherwise smooth without visible thickening. There is no evidence of cystic or CBD dilation. There is no evidence of effusion.

### ***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 intestines are normal in wall thickness and layering. Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

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

### ***Pancreas***

The observed pancreas is prominent (enlarged) in size, hypoechoic to surrounding tissue and irregular in shape with a swollen undulating contour. Enhanced hyperechoic ill-defined surrounding fat is noted.

### ***Free Abdomen***

There is no evidence of peritoneal effusion or apparent lymphadenopathy noted in these images.

## **ULTRASONOGRAPHIC FINDINGS**

### **PRIMARY FINDINGS:**

- **Mild acute pancreatitis.**
- **Emerging mucocele** – 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. The non-dependent nature of this sludge combined with the cystic areas are suggestive, however, of possible emerging cystic mucosal hyperplasia or early gallbladder mucocele.
- **Heterogenous liver.**

### **SECONDARY FINDINGS:**

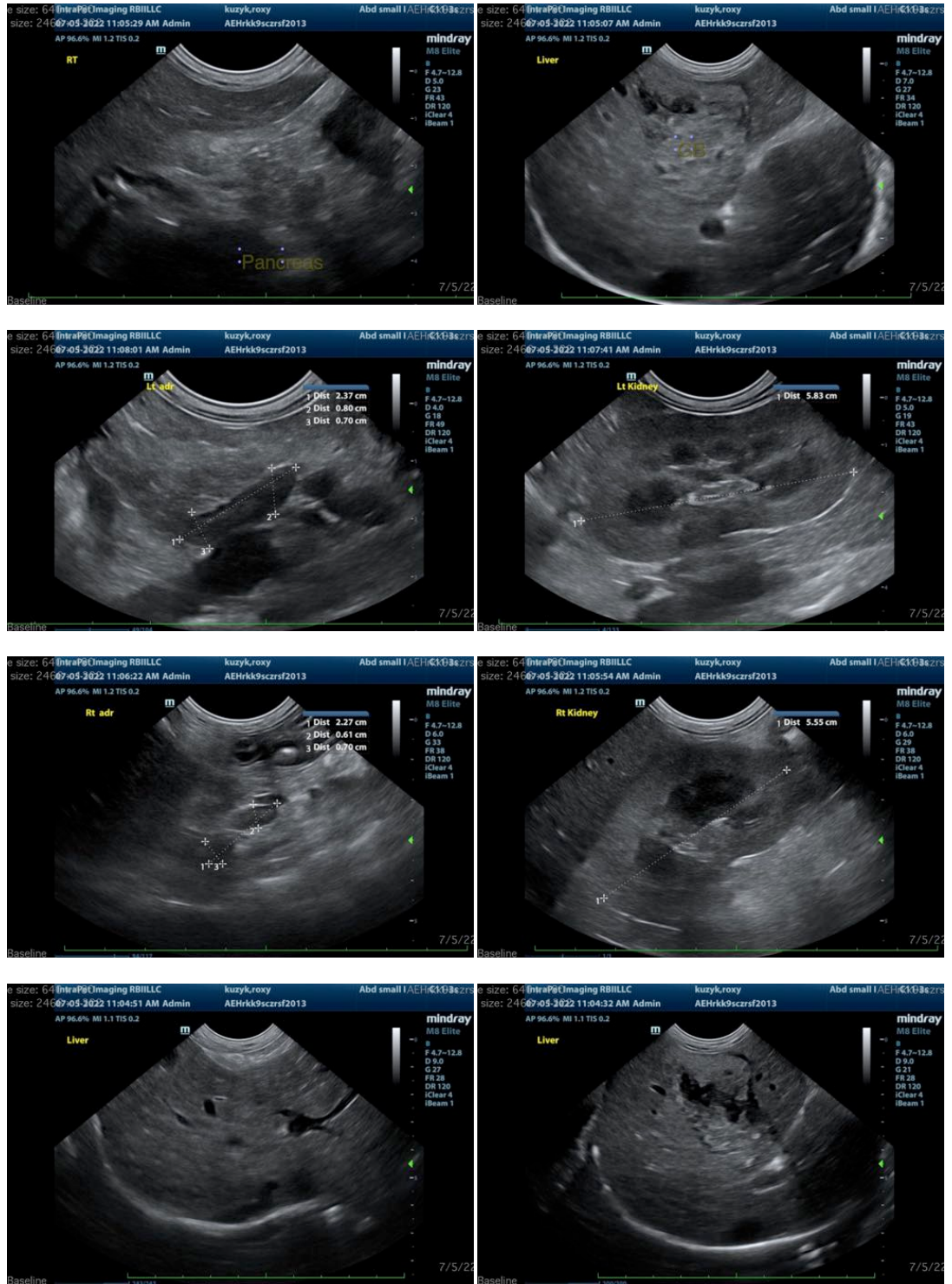
- **Age related renal changes.**

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

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.

Medical management of pancreatitis with anti-emetics, gastroprotectants, appetite stimulants or nutritional support as needed, pain management, broad spectrum antibiotics, and fluid therapy is recommended. If possible, a fresh frozen plasma transfusion and hyperbaric oxygen therapy (HBOT) could be beneficial. Monitoring of the pancreas with power doppler is recommended to identify possible necrosis as well as other potential sequelae such as abscesses, etc.

Following stabilization of this patient's transition to a long term, low fat diet may be beneficial.



The information and recommendations provided are based on the images presented by the referring veterinarian. 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**

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