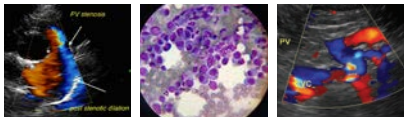
IMAGING PERFORMED BY

IntraPet.com



SonoPath

Clinical Sonography & Telecytology

EDUCATIONAL TELECONSULTATION SERVICES™

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**DATE**

7/20/23

**PATIENT**

Rosie Simons

**SPECIES**

Canine

**BREED**

Pit Bull X

**SEX**

Spayed Female

**AGE**

4/8/14

**WEIGHT**

58.7 Pounds

**INTERPRETED BY**

Beth Johnson, DVM DACVIM

**HOSPITAL NAME**

Animal Emergency Hospital

**REFERRING VET**

Dr. Perez

**INVOICE**

44212

## PRESENTING CLINICAL SIGNS

Rosie was seen here on 7/12-13/23 for abdominal exploratory where a corn cob was removed via a gastrotomy and liver lobe biopsy was completed. She went home, and was doing well until the evening of 7/18. At this time, she stopped eating. No vomiting reported, but diarrhea. The owner reports increased thirst and urination. She did not get any medications last night (18th), but owner tried to force medications today. The owner reports that she ate around the pills and spit them out. Not sure what she got if anything. She did get Denamarin last night after the owner contacted his wife. They report that she seemed painful, restless, unable to settle last night. She was panting more than normal, and seems wobbly on her feet when walking. Biopsy results: Liver: Multifocal coalescing moderate to marked nonlipid hepatocellular swelling with minimal to mild portal lymphoplasmacytic nonspecific reactive hepatitis and mild lobular hyperplasia. Medications Sent Home: Clavamox x 5 days. Omeprazole Gabapentin Cerenia x 3 days. **RDVM Diagnostics:** Chemistry: ALT was 140 ALKP was 1858 CBC: HCT 41.9% Platelets 431,000 Abdominal Radiographs: Gas distended stomach and intestines.

Current Medications: Metoclopramide, Protonix, Cerenia.
Lab Results: See attached.
Radiographs: Abdominal serosal detail is appropriate for the patient's age and body condition. Noted spondylosis deformans (mild from T11-13, moderate from L1-L3, and severe from L3-L5). The nasogastric tube courses in the esophagus through the thorax, into the gastric fundus, and into the pylorus. The follow-up image shows the tube centered in the gastric fundus. Noted soft tissue opaque material in the stomach; no overt obstruction at this time in the stomach. Small intestines contain fluid and some gas; no overt foreign material or obstruction. The colon contains granular material consistent with soft stool.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Rachel Brilhart, RDMS.

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### *Urinary System*

The urinary bladder is moderately 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.

The right kidney is normal in size (7.54 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

The left kidney is normal in size (7.24 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

### *Adrenal Glands*

The right adrenal gland is normal in size (1.0 cm at the cranial pole and 0.89 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

The left adrenal gland is normal in size (0.71 cm at the cranial pole and 0.96 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. A small incidental mineral density is noted the caudal pole of the left adrenal gland. Visible surrounding vasculature appears normal.

### *Spleen*
The 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.

### *Liver*
Liver is subjectively enlarged (swollen contour) without disruption of architecture. It has a normal homogenous echotexture. Parenchyma is diffusely hyperechoic characterized by less prominent than normal portal vein walls and increased echogenicity relative to the spleen and falciform fat. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

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 stomach wall is mildly thick, measuring between 0.5-1.0 cm thick at a rugal fold with normal intact 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 (canine duodenum < 0.5 cm and feline duodenum < 0.4 cm; other < 0.3 cm). 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. The right limb appears to be the primarily affected limb.

### *Free Abdomen*
There is a trace amount of anechoic free fluid in the cranial abdomen adjacent to the pancreas as well as markedly enhanced hyperechoic mesenteric fat throughout the cranial abdomen.

There is no apparent lymphadenopathy noted in these images.

### PRIMARY FINDINGS

- Given the appearance of the pancreas combined with the trace free fluid and enhanced mesenteric fat, acute pancreatitis is suspected to be the primary cause of this patient's reported clinical signs. Having said that, the inflammatory changes are adjacent to the a mildly thick gastric wall, so focal peritonitis secondary to the recent reported gastrotomy cannot be definitively ruled out as a contributing component.

- Hyperechoic hepatomegaly - This appearance is non-specific and most consistent with a benign steroid (endocrine) or vacuolar hepatopathy or reactive or idiopathic hepatopathy. Inflammatory

and/or infiltrative disease (such as round cell neoplasia) are also possible, but considered less likely.

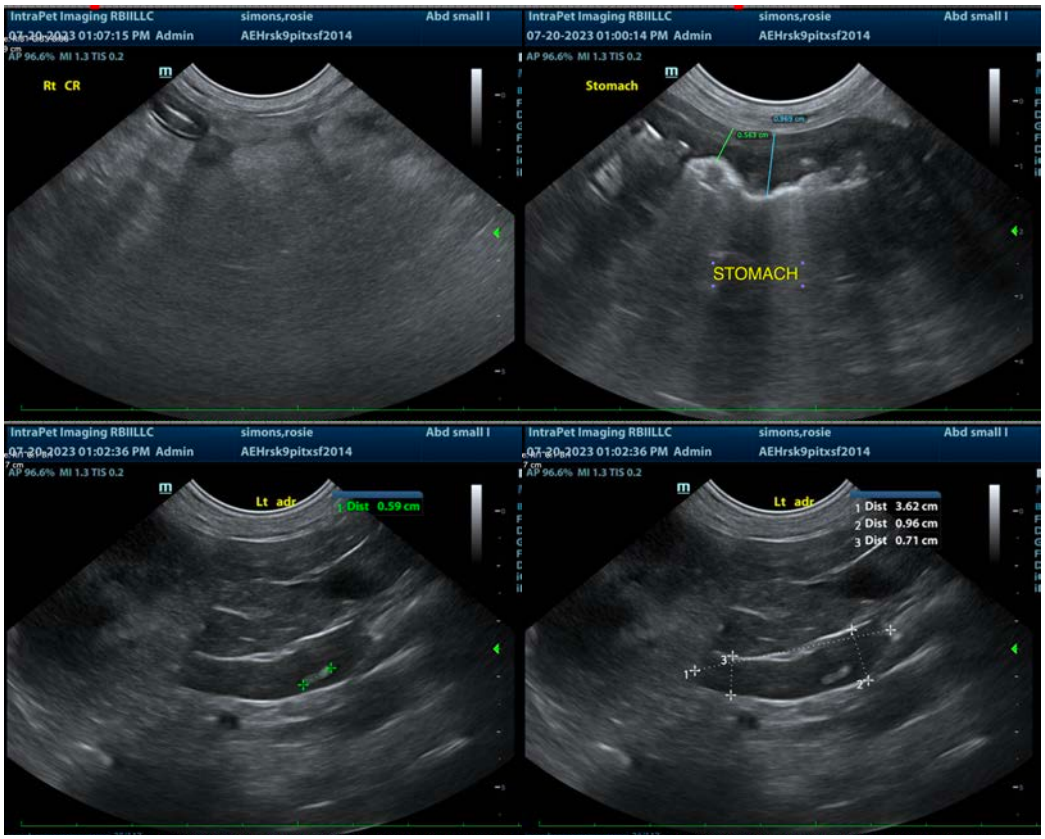
- Mild gallbladder debris - Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness. Cholecystic debris is not necessarily related to hepatobiliary disease. Echogenic bile is most commonly an incidental finding in dogs and should be interpreted in combination with clinical signs such as nausea, inappetence, cranial abdominal discomfort and/or laboratory changes such as increased ALP and/or increased Tbili.

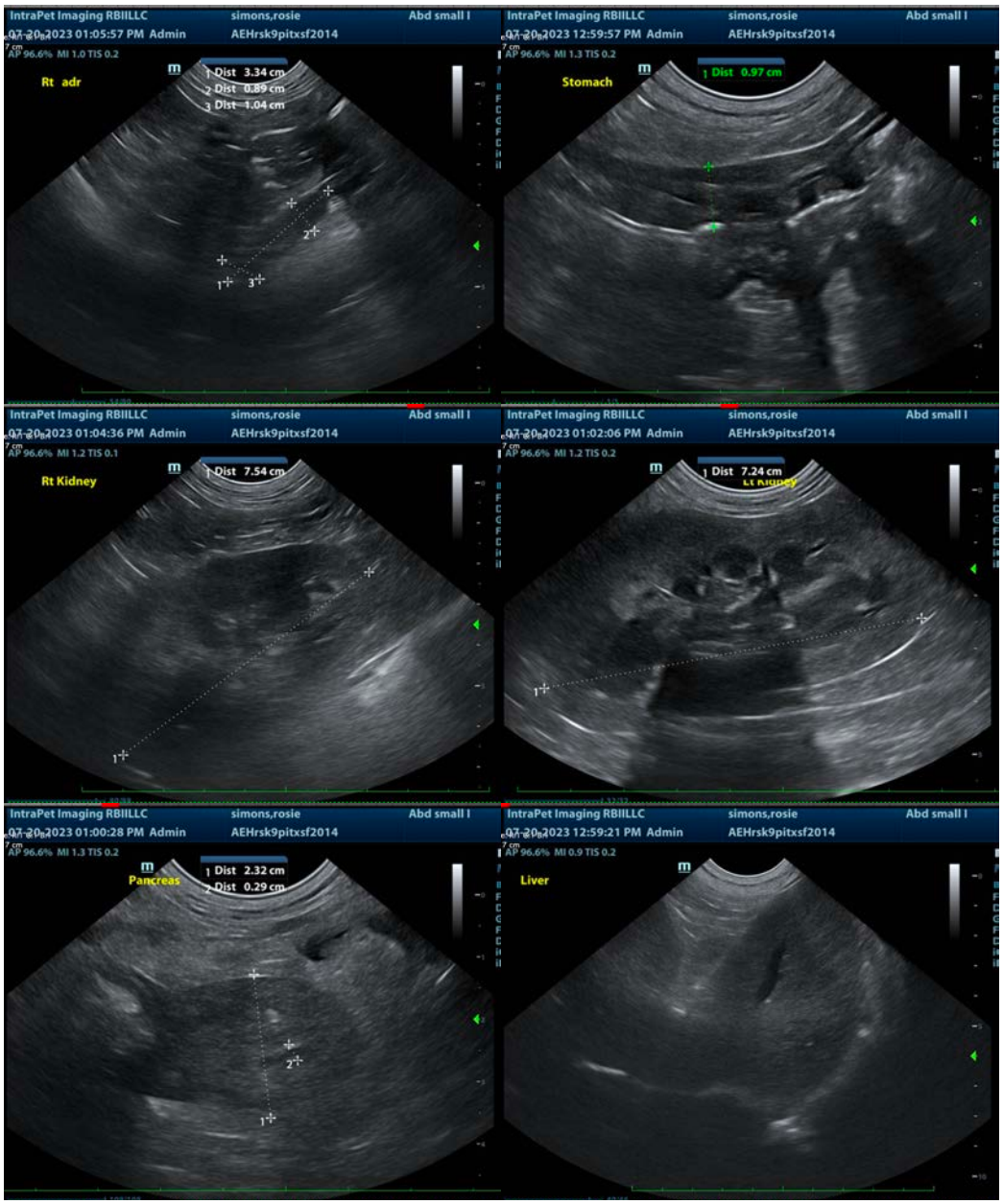
## SECONDARY FINDINGS

- A small mineral density is noted in the caudal pole of the left adrenal gland – likely of minimal to no clinical significance and should be interpreted in combination with clinical signs of adrenal disease and/or monitored for progression.

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

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. Monitoring of the pancreas as well as the stomach with power doppler is recommended to identify possible necrosis as well as other potential sequelae such as abscesses, etc.

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simons,rosie
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AEHrsk9pitxsf2014
AP 96.6% MI 1.0 TIS 0.2
Rt adr
1 Dist 3.34 cm
2 Dist 0.89 cm
3 Dist 1.04 cm
IntraPet Imaging RBIILLC
simons,rosie
Abd small I
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AEHrsk9pitxsf2014
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IntraPet Imaging RBIILLC
simons,rosie
Abd small I
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AP 96.6% MI 1.2 TIS 0.1
Rt Kidney
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IntraPet Imaging RBIILLC
simons,rosie
Abd small I
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AP 96.6% MI 1.2 TIS 0.2
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IntraPet Imaging RBIILLC
simons,rosie
Abd small I
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AP 96.6% MI 1.3 TIS 0.2
Pancreas
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2 Dist 0.29 cm
IntraPet Imaging RBIILLC
simons,rosie
Abd small I
07 20 2023 12:59:21 PM Admin
AEHrsk9pitxsf2014
AP 96.6% MI 0.9 TIS 0.2
Liver


**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