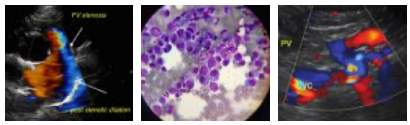
IMAGING PERFORMED BY

IntraPet.com



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**DATE**
3/14/23

**PATIENT**
Phantom Siegmann

**SPECIES**
Canine

**BREED**
Australian shepherd

**SEX**
Female, spayed

**AGE**
10/10/2009

**WEIGHT**
53.2 lbs.

**INTERPRETED BY**
Andrea Nicastro, DVM, Diplomate ACVIM (*Small Animal Internal Medicine*)

**HOSPITAL NAME**
Honeygo AH

**REFERRING VET**
Dr. Moffa

**INVOICE**
14742

## PRESENTING CLINICAL SIGNS

On and off diarrhea, weight loss, decreased appetite.

Current Medications: Metro 500mg BID- 7 days, Denamarin daily.
Lab Results: AST/ALT/ALKP/GGTP/Bilirubin all elevated, WBC 20.6.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Declined.
Imaging Performed By: Andi Parkinson, BS, RDMS.

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### *Urinary System*

The urinary bladder and visible portion of the pelvic urethra are normal for the degree of luminal distension. The urine is anechoic with no evidence of debris. Cystic calculi and discrete masses are not observed. The region of the trigone is normal.

The left kidney is normal size (xxx cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

The right kidney is normal size (5.80 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild to moderate loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

### *Adrenal Glands*

The left adrenal gland is enlarged (1.42 cm at cranial pole) (1.32 cm at caudal pole) (3.73 cm in length) with an irregular shape. A 1.66 x 1.35 cm hyperechoic to slightly heterogeneous nodule is observed at the cranial pole. In addition, a 1.79 x 1.17 cm hyperechoic to slightly heterogeneous nodule is observed at the caudal pole. There is loss of glandular detail. Surrounding vasculature appears normal.

The right adrenal gland is enlarged (1.95 cm at cranial pole) (0.99 cm at caudal pole) (3.49 cm in length). A 2.04 x 1.95 cm hyperechoic to heterogeneous nodule/mass is observed at the cranial pole. The glandular echogenicity and detail at the caudal pole are unremarkable. The phrenicoabdominal vein and surrounding vasculature are normal.

### *Spleen*

The spleen is normal in size (1.73 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

### *Liver*

The liver is normal to slightly prominent in size with normal curvilinear peripheral contours. The parenchyma is isoechoic relative to the spleen and mildly heterogeneous in appearance with ill-defined hyperechoic areas on the right side. Vascular and biliary tracts are of normal volume with no evidence of congestion. The gall bladder lumen is moderately distended. The wall is mildly to moderately thickened (up to 0.35 cm) and irregular. A moderate to large amount of suspended, echogenic debris/sludge is observed within the lumen. The cystic and common bile ducts are diffusely dilated (up to 1.19 cm) with subjectively thickened walls. Heterogeneous material is observed throughout the cystic and common bile duct lumens. The duodenal papilla is enlarged (0.71 cm in width). The mesentery surrounding the gallbladder is hyperechoic.

### *Gastrointestinal*

The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is not distended. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The pyloric

outflow tract is patent. The small intestinal lumen is not dilated. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. No obstructive disease is noted.

### *Pancreas*
The right limb of the pancreas is normal in size with normal curvilinear peripheral contours. The parenchyma is largely isoechoic relative to surrounding omental fat and slightly mottled in appearance. The pancreatic duct is visible but not overtly dilated. There is no evidence of peripancreatic inflammation or effusion. See also *Other.*

### *Free Abdomen*
There is no obvious evidence of free fluid.

### *Lymph Nodes*
See *Other.*

### *Other*
A 0.69 cm hypoechoic nodule is observed in the right cranial quadrant.

## ULTRASONOGRAPHIC FINDINGS
**Primary Findings:**

- The gallbladder changes are consistent with cholecystitis +/- a mucocele. The cystic and common bile duct changes are also concerning for cholangitis. The heterogeneous material within the cystic and common bile duct lumen may represent a mucous plug, debris or a mass. There is concern for recent gallbladder rupture or impending rupture, as adjacent peritonitis is present.

- The hepatic parenchymal changes are non-specific and may be secondary to inflammatory disease (i.e., bacterial cholangiohepatitis, chronic hepatitis), regenerative nodular hyperplasia, vacuolar hepatopathy, fibrosis or other hepatopathy.

- Bilateral adrenal nodules/masses. Differentials include benign nodular hyperplasia or emerging tumors (i.e., adenomas, adenocarcinomas, pheochromocytomas).

**Secondary Findings:**

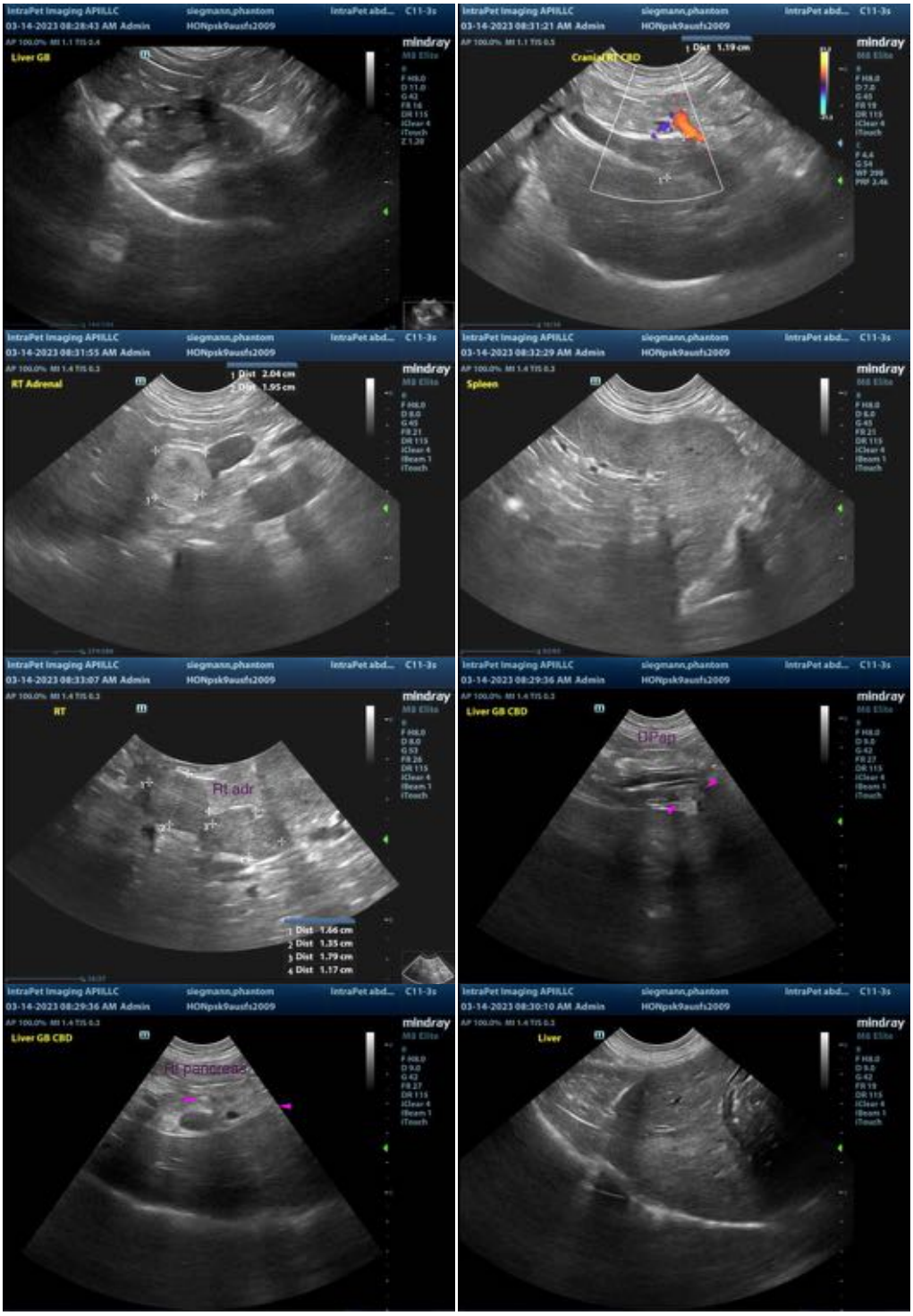
- The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.

- The origin of the hypoechoic nodule in the right cranial quadrant is unclear. It may represent a pancreatic nodule (i.e., benign nodular hyperplasia), a prominent lymph node, nodule in the mesentery, other. A benign process is favored.

- Bilateral, chronic age-related renal changes.

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS
An abdominal exploratory with possible cholecystectomy is strongly recommended due to the concern for possible gallbladder rupture or impending rupture. Liver biopsies should also be obtained at the time of surgery. If pursued, clotting times and thoracic radiographs should be performed prior to anesthesia. In the

meantime, initiation of a broad-spectrum antibiotic, Ursodiol, hepatic antioxidants and other supportive measures are recommended.




**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.

Andrea Nicastro, MPH, DVM, Diplomate DACVIM (Small Animal Internal Medicine)
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