IMAGING PERFORMED BY

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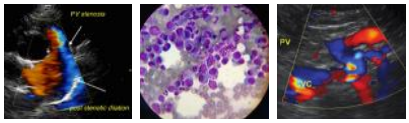

SonoPath
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DATE
6/24/22

PATIENT
Navi Major

SPECIES
Canine

BREED
German Shepherd Mix

SEX
Spayed Female

AGE
6/22/12

WEIGHT
72.4 Pounds

INTERPRETED BY
Kathleen Sennello DVM, MS, Diplomate ACVIM (Small Animal Internal Medicine)

HOSPITAL NAME
Animal Emergency Hospital

REFERRING VET
Dr. Thompson

INVOICE
16278

PRESENTING CLINICAL SIGNS

History: Navi 10 y/o FS German Shepherd Mix who was referred for vomiting and not eating - not been interested in eating - Elevated kidney values, pancreatic enzymes - yesterday did not want eat breakfast, ate dinner - no interest in eating today, did eat some salmon - vomited once 5-7 days ago - diarrhea, 2-3 days, more liquid then soft serve lethargy - tried different diets - no known FB ingestion, chance swallowed a cat toy - 27 U vetsulin BID 10/10pm 1-2 months (April), discussed 30 U - third insulin did not respond well to other insulin types - increased drinking and urination Medications - preventatives - probiotic - Vetsulin 27 U BID

Current Medications: Ampicillin, Buprenorphine, Entyce, Ondansetron, Insulin Humulin R, Cerenia, Protonix.
Lab Results: See attached.
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 urine. The Bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

The left kidney has a normal shape and size (6.72 cm). Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal. Small occasional cortical cysts were present.

The right kidney has a normal shape and size (6.74 cm). Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal. Small occasional cortical cysts were present.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.95 cm at the caudal pole. It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

The right adrenal gland is normal in size measuring 0.85 cm at the caudal pole. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

Spleen

The spleen is subjectively normal in size, echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. There is a 0.85 cm discreet hyperechoic nodule visualized toward the periphery of the parenchyma, most consistent with a benign myelolipoma.

Liver

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed

The gallbladder lumen is significantly distended. The gallbladder wall is thickened (0.27 cm) with adherent debris. There is a large amount of primarily non-organized echogenic debris in the dependent portion of the gallbladder. There is no evidence of bile duct dilation or inflammation around the gall bladder.

Gastrointestinal

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.7cm 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. No masses or focal lesions were observed.

The visualized areas of duodenum, jejunum and ileum have a relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. The duodenum measured as normal (between 0.3-0.5cm in wall thickness) and the jejunum measured as normal (between 0.2-0.47cm.) Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Sections of colon are visualized with formed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

Pancreas

The pancreas is prominent and mottled 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

- Decreased corticomedullary distinction in both kidneys with occasional small cortical cysts. Mild loss of corticomedullary distinction in both kidneys could be consistent with chronic degenerative disease or interstitial nephrosis.

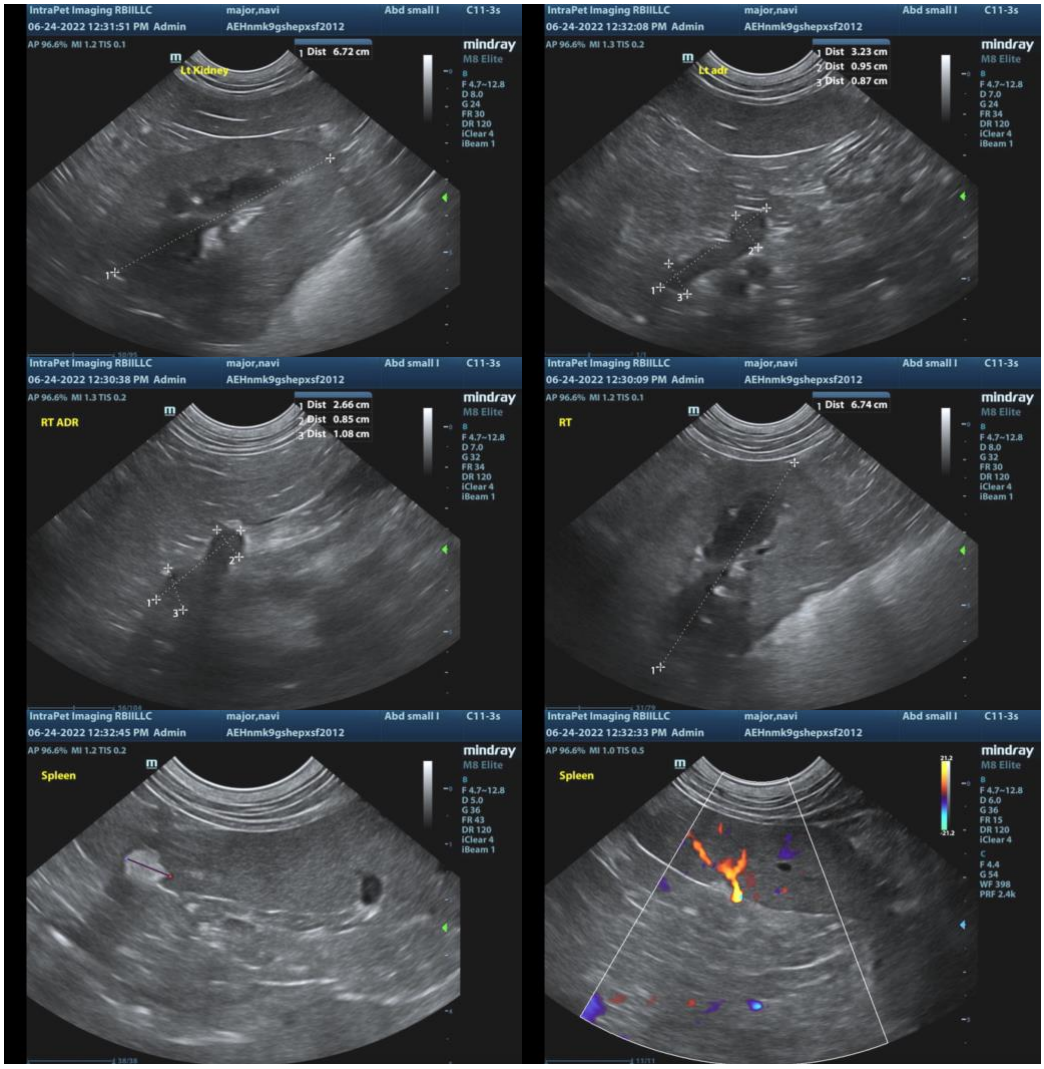
- Prominent mottled pancreas. The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.

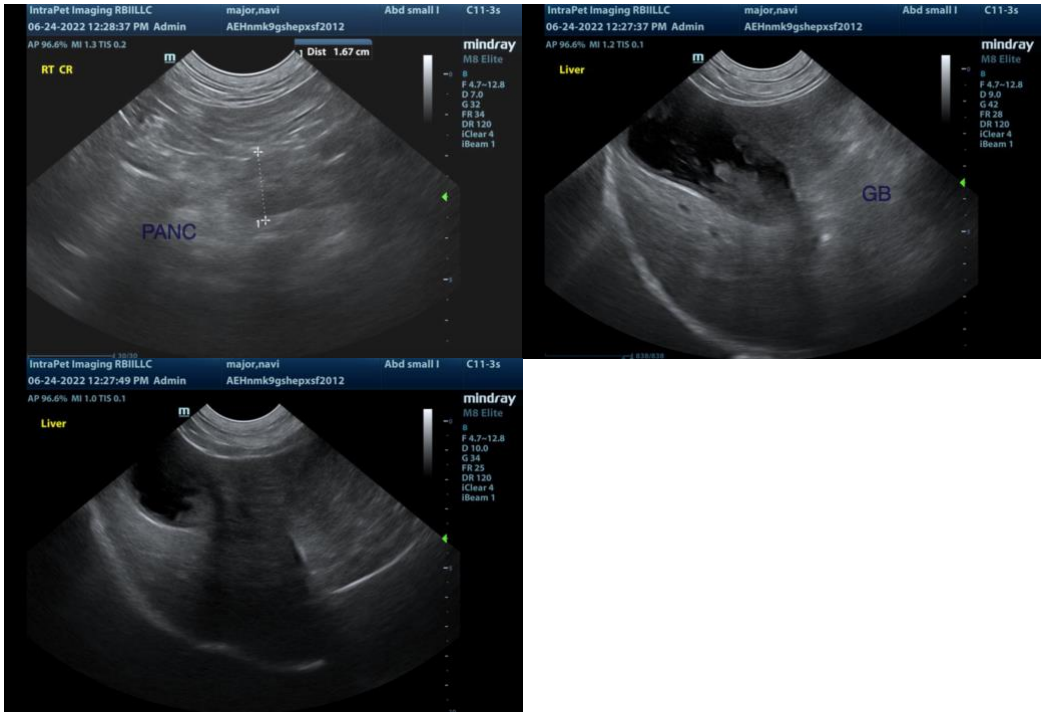
- Large heterogeneous liver. The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy. This is likely consistent with a diabetic hepatopathy.

- Large gallbladder debris with mild gallbladder wall thickening. Findings could be consistent with cholecystitis. Correlate with lab work changes.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Both kidneys have decreased corticomedullary distinction and small rare cortical cysts. These findings are consistent with chronic progressive renal disease. I recommend urinalysis, culture and blood pressure evaluation. The liver is large and heterogeneous, and the gallbladder has a large amount of debris with some adhered to the gallbladder wall and thickening of the gallbladder wall. These changes could be consistent with cholecystitis. If liver enzymes are elevated, consider starting ursodiol therapy +/- antibiotics and continued monitoring of the gallbladder with ultrasound.





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.

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