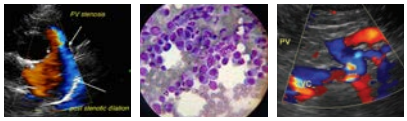
IMAGING PERFORMED BY

IntraPet.com



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com

DATE

1/18/22

PATIENT

Charlie Nonemaker

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

1/17/07

WEIGHT

26.9 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Rachel Brilhart RDMS

HOSPITAL NAME

Animal Emergency Hospital

REFERRING VET

Dr. Goessling

INVOICE

34338

PRESENTING CLINICAL SIGNS

History: Presenting Complaint:
Stroke
Weak
Confused
History: Date: 01-17-2022 Notes: PC: stroke, weak, confused ATO: dx with diabetes in 2013; Prozinc insulin 10 units BID, last given at 6pm
this evening. Last glucose curve in November. Tonight, suddenly jumped off sofa, defecated on the floor, seemed disoriented, not interested in food, dragging legs mainly on the right side. Assessment: Obesity, hypoglycemia. DDX include underlying endocrine issue changing insulin requirement, neoplasia, infection, insulin overdose, open.

Current Medications: Prozinc Insulin at home, Dextrose 20% and Cerenia in hospital.
Lab Results: Attached separately.
Date of Previous IntraPet Ultrasound: No previous IntraPet scans.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.

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 (5.17 cm) with pyelectasia at 0.89 cm. Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is mild perinephric inflammation. No free fluid. There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (5.11 cm) with pyelectasia at 0.68 cm. Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is mild perinephric inflammation. No free fluid. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.47 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 region of the right adrenal (between right cranial kidney and vena cava) is unremarkable, but the adrenal is not distinctly visualized. 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. No focal parenchymal abnormalities are visualized.

Liver

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

The gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are primarily anechoic. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.36cm 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 uniform diameter with minimal fluid distension. Wall thickness is normal to slightly increased. Bowel loops follow a typical curvilinear path with distinct wall layering, but some areas display a prominent muscularis layer which does not display the typical 1:3 muscularis:mucosa layer ratio. Jejunum wall measured 0.35 cm. 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 large and hypoechoic to surrounding mesentery. There is no evidence of cystic lesions, but the parenchyma appears somewhat nodular in some areas. There is evidence of regional mesenteric inflammation. Consistent with moderate to severe pancreatitis.

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

- Prominent, severely hypoechoic pancreas with somewhat nodular appearance and surrounding inflammation – The pancreatic changes are most consistent with moderate pancreatitis/pancreatic inflammation. Recommend fPLI testing and continued monitoring for improvement or possible development of a pancreatic abscess. Consider fine needle aspirate if not improving. An underlying neoplastic process cannot be ruled out.

- Decreased corticomedullary distinction in both kidneys with bilateral pyelectasia and surrounding inflammation – Mild loss of corticomedullary distinction in both kidneys could be consistent with chronic degenerative disease or interstitial nephrosis. Pyelectasia of the left/right kidney could be consistent with pyelonephritis, chronic renal disease, secondary to PU/PD or fluid therapy (if applicable), other.

- Prominent muscularis layer to the small intestine – The small intestinal wall changes are most consistent with an inflammatory process (i.e., inflammatory bowel disease) with a low possibility of emerging lymphoma.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

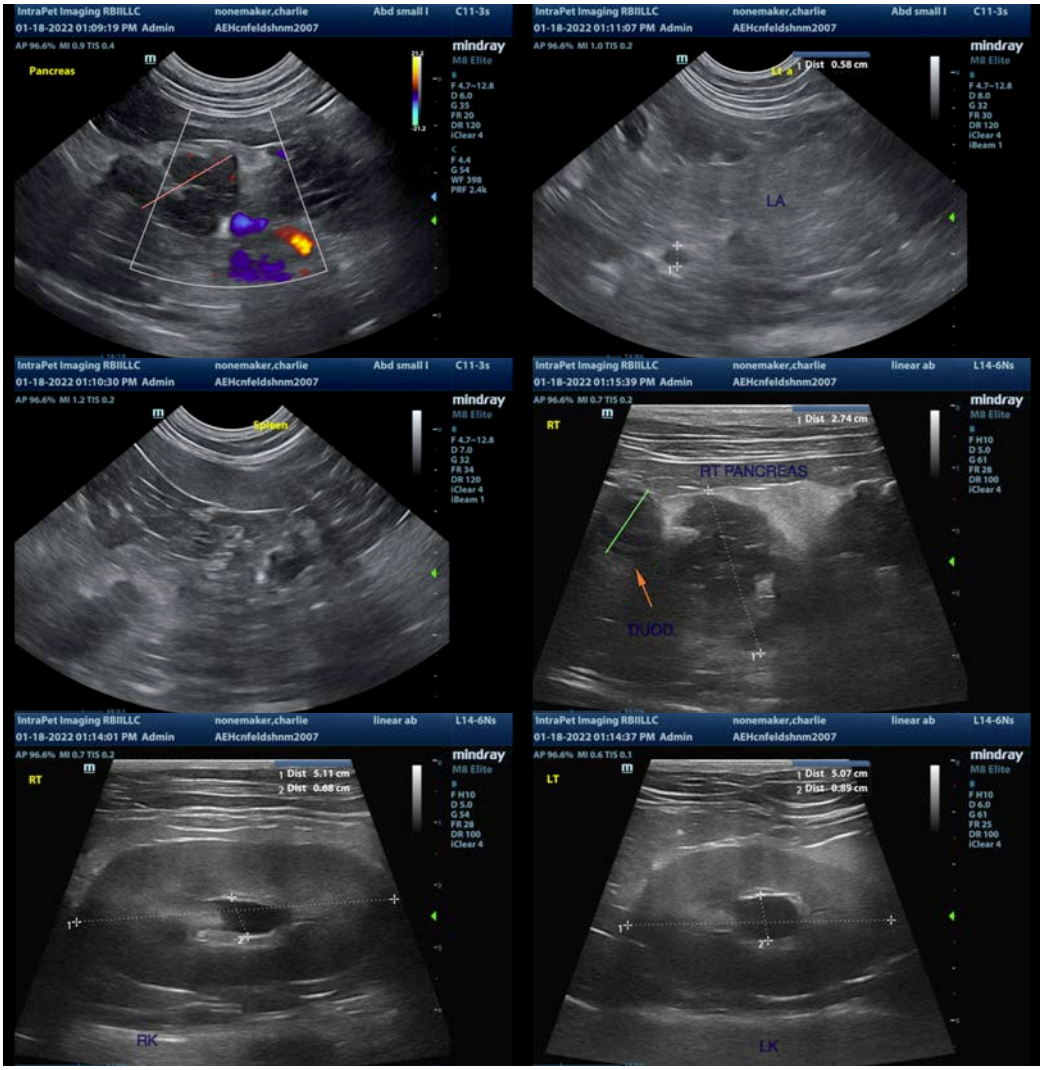
Multiple lesions were visualized on today's scan, but I do not know if these directly relate to the episode described in the history. The pancreas appears very prominent, almost nodular and hypoechoic with surrounding inflammation. The primary differential would be severe pancreatitis, but underlying pancreatic

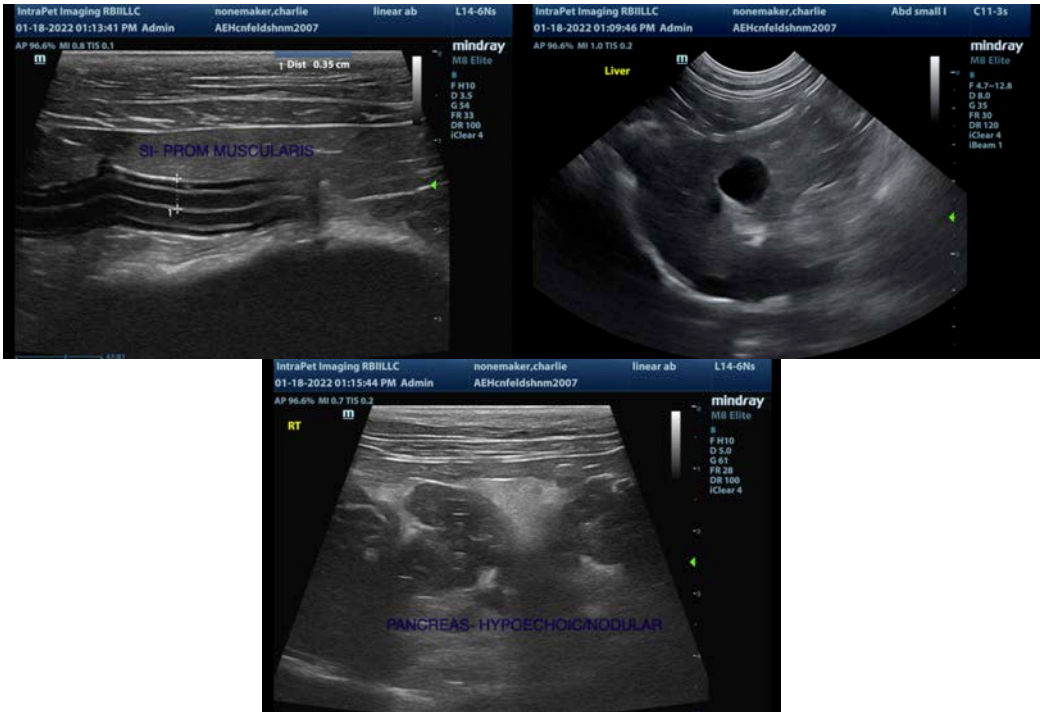
neoplasia cannot be excluded as a possibility. Consider a GI panel with a qualitative PLI, TLI, cobalamin and folate to Texas A&M, and a possible fine needle aspirate of the pancreas or continued monitoring with ultrasound. If there was a dramatic hypotensive event associated with the collapse episode, acute pancreatitis would be possible.

The kidneys appear somewhat large and have a decreased corticomedullary distinction for this young of a cat. Additionally, there is bilateral pyelectasia with no obvious obstructive visualized. Correlate with renal values. Recommend a blood pressure evaluation and urine culture to try to rule out pyelonephritis.

Additionally, there is some prominence of the muscularis layer of the small intestine. If there are no underlying GI signs, this could be an incidental finding.

Consider cardiac ultrasound for further evaluation of a cardiac event, 3-view thoracic radiographs, blood pressure evaluation, and serial glucose monitoring for a possible hypoglycemic episode. Recommend treatment for pancreatitis and close continued monitoring. A consultation with a veterinary neurologist could be a consideration.





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)
kathleen.sennello@sonopath.com