**DATE**

11/26/21

PRESENTING CLINICAL SIGNS

11-24-2021 Notes: Referral for vomiting and hemorrhagic diarrhea. P ate a little piece of chicken yesterday. P vomited the chicken up. P has not been able to keep any water down. BUN:48 Phosphorus 9.6 TP 8.6. On PE Severe dehydration.

PATIENT

Katie Arkins

Current Medications: Odansetron, Amp.Sulb, Buprenorphine, Maropitant, Pantoprazole.

SPECIES

Canine

Lab Results: 11/25/21 Glucose= 99 (80-120), PCV= 59 (37-55), TS= 9.2 (5.0-8.0). 11/25/21 PCV= 48 (37-55), TS= 7.2 (5.0-8.0), Crea= 0.6 (0.5-1.8), BUN= 14 (7-27).

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

BREED

Poodle Mix

Stat Report: Not requested.

SEX

Spayed Female

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.

AGE

11/24/08

The left kidney has a normal shape and size (4.63 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.

WEIGHT

13.6 lbs

The right kidney has a normal shape and size (4.1 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. A 0.65 cm non-obstructive nephrolith was noted. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

INTERPRETED BY

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

IMAGING PERFORMED BY

Andi Parkinson RDMS

Adrenal Glands

The left adrenal gland is normal in size measuring 0.65cm 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.

HOSPITAL NAME

Animal Emergency
Hospital

The right adrenal gland is normal in size measuring 0.77 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.

REFERRING VET

Dr. Roper

Spleen

The spleen is subjectively normal in size and the echotexture is homogenous. The splenic capsule is smooth with no visible irregularities. Rare discrete focal hyperechoic, perivascular parenchymal abnormalities are present. The appearance of these lesions is most consistent with benign splenic myelolipomas. The blood flow through the hilus and splenic parenchyma appears normal.

INVOICE

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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 moderately distended. The wall of the gallbladder appears thickened and double layered measuring 0.25 cm. 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 <0.7cm 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. The stomach wall in contact with the pancreas appears somewhat and hypoechoic measuring 0.44 cm.

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 (0.36) and the jejunum measured as normal (0.34 cm). Visualized peristalsis appears appropriate. The areas of duodenum in contact with the right limb of the pancreas appear thickened and corrugated. This is likely inflammatory change secondary to the inflammation associated with the pancreas.

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 nodules or cystic lesions. There is evidence of regional mesenteric inflammation. Consistent with 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 increased echogenicity and reactivity surrounding the inflamed pancreas.

Other

There was no evidence of significant pericardial effusion.

ULTRASONOGRAPHIC FINDINGS

PRIMARY FINDINGS:

- Large, prominent, hypoechoic, severely inflamed pancreas. The pancreatic changes are most consistent with severe pancreatitis/pancreatic infiltration. I recommend fPLI testing and continued monitoring for improvement or possible development of a pancreatic abscess. Consider FNA if not improving.
- Large heterogenous 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.
- Decreased corticomedullary distinction in both kidneys with right-sided non-obstructive nephrolith. Mild loss of corticomedullary distinction in both kidneys could be consistent with chronic degenerative disease or interstitial nephrosis.

- Thickened gallbladder wall. This is likely reactive secondary to hypotension and severe illness. I recommend to continue monitoring.

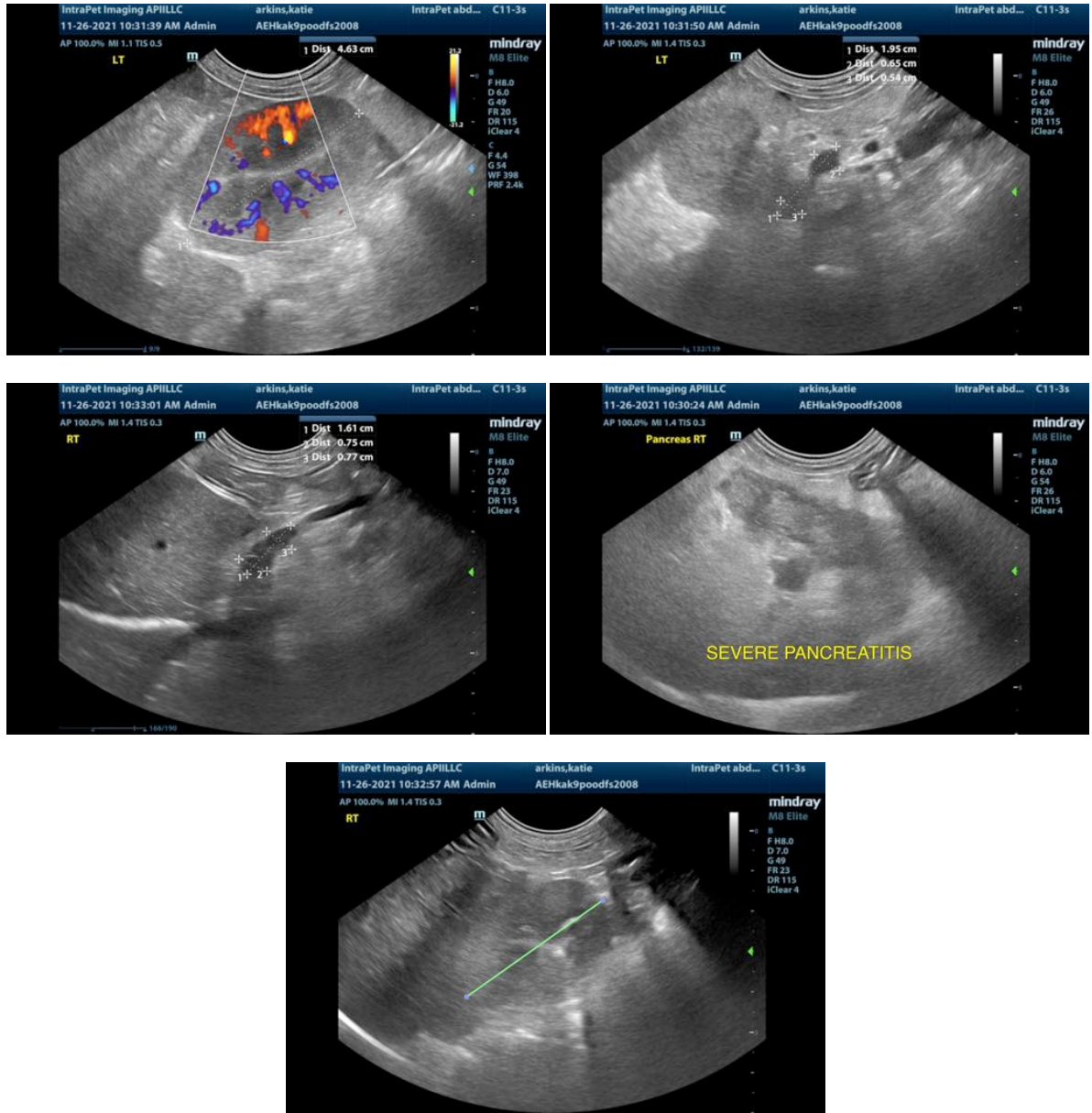
SECONDARY FINDINGS:

- Hyperechoic foci visualized in the spleen. These are most likely benign myelolipomas. I recommend to continue monitoring.
- Thickened, hypoechoic stomach wall and duodenum in area of the pancreas. These changes are likely secondary to inflammation associated with the pancreas.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The pancreas appears severely inflamed with severe inflammatory changes. There are no pockets of free fluid or mass effects consistent with a tumor or abscess. I recommend aggressive supportive care for pancreatitis and continue monitoring. I recommend three view thoracic radiographs to look for evidence of concurrent intrathoracic disease and serial blood work to look for post hepatic biliary obstruction secondary to pancreatic disease.





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.

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