IMAGING PERFORMED BY

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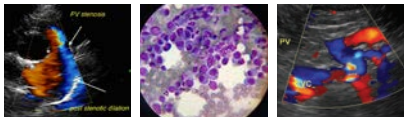

SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
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DATE

6/15/23

PATIENT

Taint Johnson

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

4/6/10

WEIGHT

9.96 Pounds

INTERPRETED BY

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

HOSPITAL NAME

Everhart VH

REFERRING VET

Dr. Hays

INVOICE

43214

PRESENTING CLINICAL SIGNS

Patient presented on 4/6 for abnormal episode in which he fell off couch, tail puffy, ran away (discussed Possible seizure). Episode was singular and has not occurred since. Pet is underconditioned, 2-3/9 BCS. Labs submitted, thyroid 2.7, USG of 1.019, elevated amyl and CK but otherwise gen nsf. follow up Ft4EQ of 44. At follow up status update owner reports great appetite but no wt gain. patient does vomit occasionally but this has not changed recently. Currently receiving cerenia as trial/empiric treatment and gaba for possible pain

Current Medications: Cerenia 16mg Tablet 5/30/2023, Gabapentin 50mg/ml oral per ml 5/30/2023
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 (3.99 cm) with significant pyelectasia at 0.54 cm and a nephrolith visualized within the renal pelvis measuring 0.47 cm. Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (3.97 cm) with pyelectasia at 0.46 cm and linear mineralizations measuring 1.1 cm and 1.0 cm. Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.32 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 0.38 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 (0.90 cm in width at the level of the hilus). The spleen echotexture is heterogenous and mottled, 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 mild and 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 increased. Jejunum measures 0.36 cm. Bowel loops follow a typical curvilinear path. Some areas have reduced detail of wall layering. Visualized peristalsis appears appropriate. There is diffuse thickening and prominence of the muscularis layer of the small intestine, but additionally there are focal areas with more severe thickening and complete loss of layering.

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 left limb of the pancreas is prominent and mottled compared to the surrounding isoechoic mesentery. The caudal aspect of the left limb of the pancreas has the appearance of a cystic mass effect measuring approximately 2.57 cm x 6.49 cm. This lesion consists of a small amount of irregular, mottled parenchyma with numerous variably sized irregular cystic lesions, the largest of which measures 1.95 cm x 1.44 cm. There is no evidence of regional mesenteric inflammation or fluid.

Free Abdomen

Evaluation of the peritoneal cavity did not reveal any evidence of effusion. There is a severe mesenteric lymphadenopathy with large, hypoechoic, rounded lymph nodes at the mesenteric root measuring 1.55 cm x 4.41 cm and 1.59 cm x 4.91 cm. The omentum appears hyperechoic around the abnormal bowel and lymph nodes.

ULTRASONOGRAPHIC FINDINGS

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

- Subjectively mottled spleen – The diffuse splenic changes are non-specific and could be consistent with lymphoid hyperplasia, extramedullary hematopoiesis, infiltrative neoplasia, inflammation, other. Cytology or histopathology would be necessary to get a definitive diagnosis.

- Large, cystic, mottled mass effect towards the caudal aspect of the left limb of the pancreas – This could represent a benign or neoplastic cystic lesion (benign pancreatic cyst, adenocarcinoma, etc.).

- Diffuse small intestinal thickening with a prominent muscularis layer as well as some focal areas of bowel with severe thickening and complete loss of layering – Findings are concerning for infiltrative disease and focal bowel mass lesions. Primary differential would be round cell neoplasia.

- Severe mesenteric lymphadenopathy – The severe mesenteric lymphadenopathy is most concerning for a neoplastic process, although you can see significant lymphadenopathy in some cases of autoimmune/inflammatory disease, infectious disease (tick born disease-such as bartonella, fungal infections, FIP (cats)) etc. A fine needle aspirate with cytology is recommended for further evaluation.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

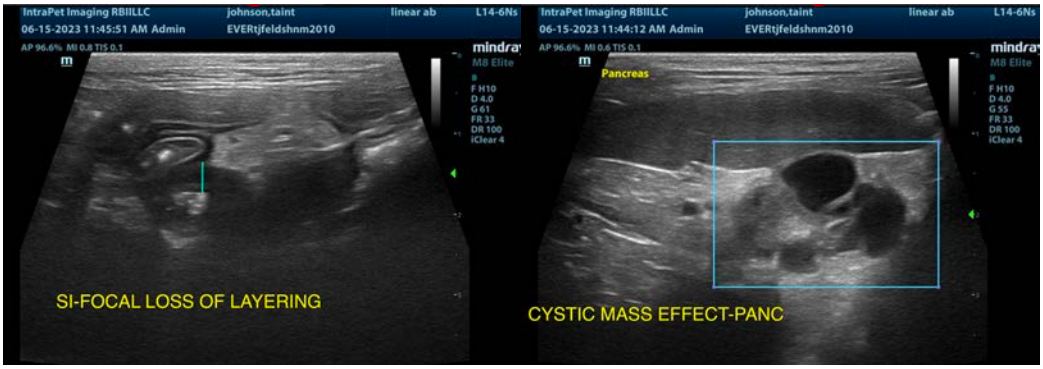
There is severe enlargement of the mesenteric lymph nodes and focal areas of small intestine that have complete loss of wall layering and increased wall thickness. Both findings are concerning for underlying round cell neoplasia. Recommend a fine needle aspirate of an enlarged mesenteric lymph node.

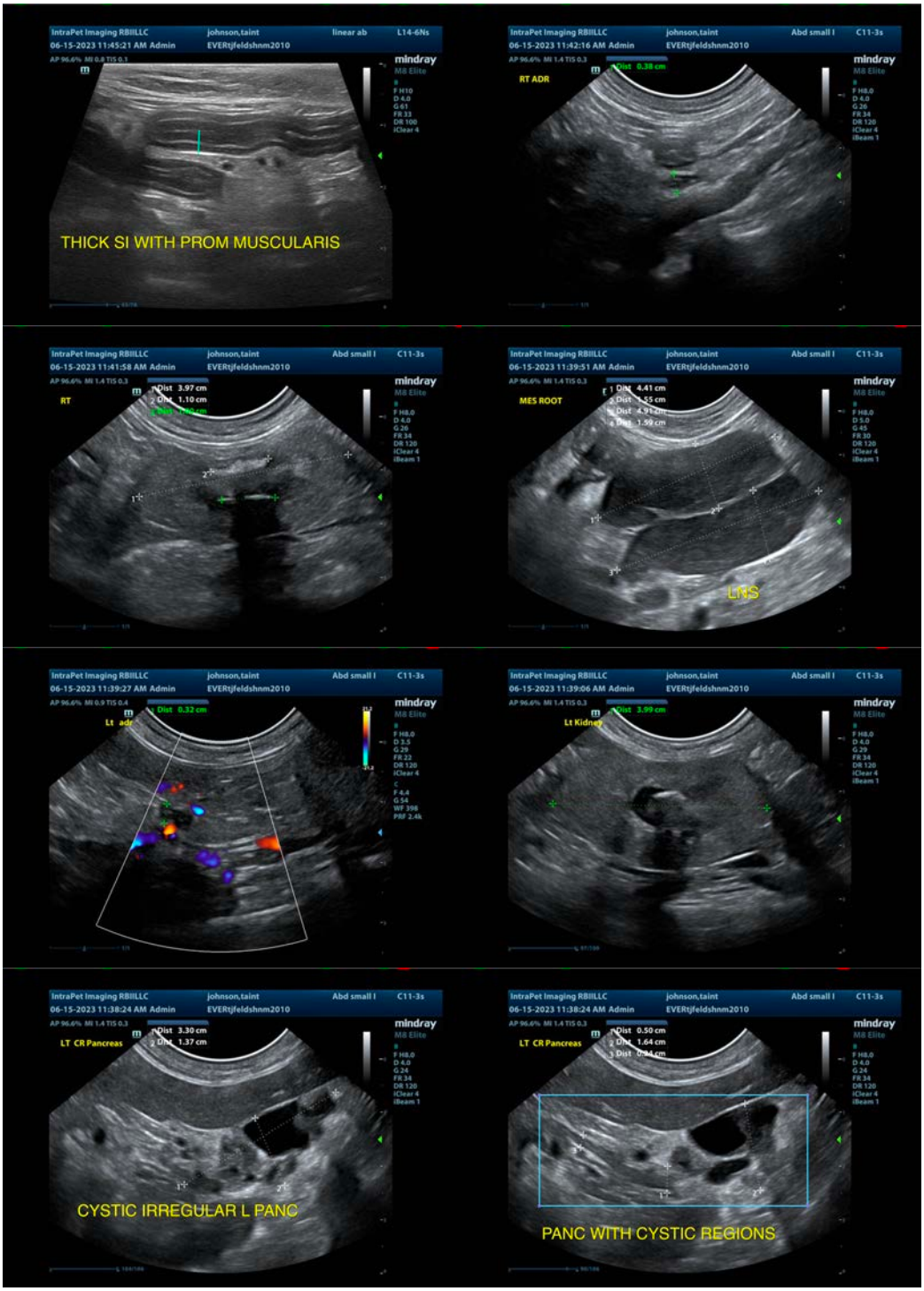
Additionally, there is a cystic mass effect associated with the caudal aspect of the left limb of the pancreas. This could represent a benign lesion, creating a mass effect due to the numerous cysts present, or this could be a cystic neoplastic lesion. Therapeutically, you could consider drainage of the pancreatic cysts, and if possible fine needle aspirate of the parenchyma. I suspect this is unrelated to the bowel and lymph node changes (but cannot be sure). I might consider continuing to monitor this lesion while addressing the lymphadenopathy and bowel lesions.

The changes visualized associated with the kidneys are consistent with chronic renal failure with nephrolithiasis. The pyelectasia present could be secondary to pyelonephritis or periodic obstructive disease. There is a stone in the renal pelvis of the left kidney, but no evidence of a severe obstruction currently. Recommend a blood pressure evaluation, urinalysis and culture.

If a cytologic diagnosis can be made off a lymph node aspirate, recommend consultation with a veterinary oncologist regarding treatment options and prognosis. If a cytologic diagnosis cannot be obtained based on fine needle aspirate of a lymph node, surgical biopsies of lymph nodes, bowel and pancreas may be necessary.

Recommend three view thoracic radiographs to evaluate for possible concurrent thoracic disease/involvement.

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PANC WITH CYSTIC REGIONS

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.

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