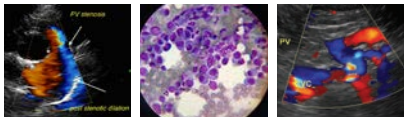
IMAGING PERFORMED BY

IntraPet.com



SonoPath
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DATE

4/27/23

PATIENT

Nittany Wittinger

SPECIES

Feline

BREED

DSH

SEX

Spayed Female

AGE

7/16/05

WEIGHT

9.7 Pounds

INTERPRETED BY

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

HOSPITAL NAME

Bayside AMC

REFERRING VET

Dr. Beigel

INVOICE

46993

PRESENTING CLINICAL SIGNS

Hx of hyperthyroidism; chronic diarrhea and weight loss of ~3-4 months duration; palpable mid-abdominal mass appreciated on most recent PE (BW pending at time of submission for ultrasound request)_

Current Medications: None listed.
Lab Results: See attached.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Declined at this time.
Imaging Performed By: Stephanie Warga RDCS, RVT.

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 (4.07 cm). Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. The kidney is surrounded by a large volume of hypo- to anechoic fluid contained within a capsule. The kidney and the cystic region measure approximately 5.84 cm x 8.5 cm. Findings are most consistent with a perinephric pseudocyst. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney is small and irregular, measuring 2.68 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 pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.50 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 0.51 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 (0.84 cm), 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. There is a small area of small hypoechoic structures near the gallbladder, most consistent with a small cystic region of the liver measuring approximately 0.96 cm in diameter.

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 appears subjectively, mildly increased. Bowel loops follow a typical curvilinear path with distinct wall layering. Jejunum wall measures 0.30 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 area of the pancreas is normal and isoechoic to surrounding 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.

PRIMARY FINDINGS

- Decreased corticomedullary distinction of the left kidney with a large volume of surrounding anechoic fluid contained within a capsule – Findings are most consistent with a perinephric pseudocyst. Other less likely differentials would include a large renal cyst.

- Small, irregular right kidney with decreased corticomedullary distinction – Mild loss of corticomedullary distinction in the kidney could be consistent with chronic degenerative disease or interstitial nephrosis.

- Subjectively mildly thickened small intestine – The mild small intestinal wall changes may be a normal variant in this patient or could be consistent with an inflammatory process (e.g., inflammatory bowel disease).

SECONDARY FINDINGS

- Small, hypoechoic, cystic-appearing lesion visualized in the liver – Findings are most consistent with a benign hepatic cyst. Recommend continued monitoring.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There is a large cystic structure associated with the left kidney. This is most consistent with a perinephric pseudocyst. These tend to occur in conjunction with chronic renal disease, and are most commonly benign lesions, often incidental, but issues can arise due to the mass effect created, and the pressure on the kidney can cause progressive renal disease. Rarely, these can be associated with a neoplastic process, a ureterocele, etc., and can be associated with polycystic renal disease, previous trauma, urethral obstruction, etc.

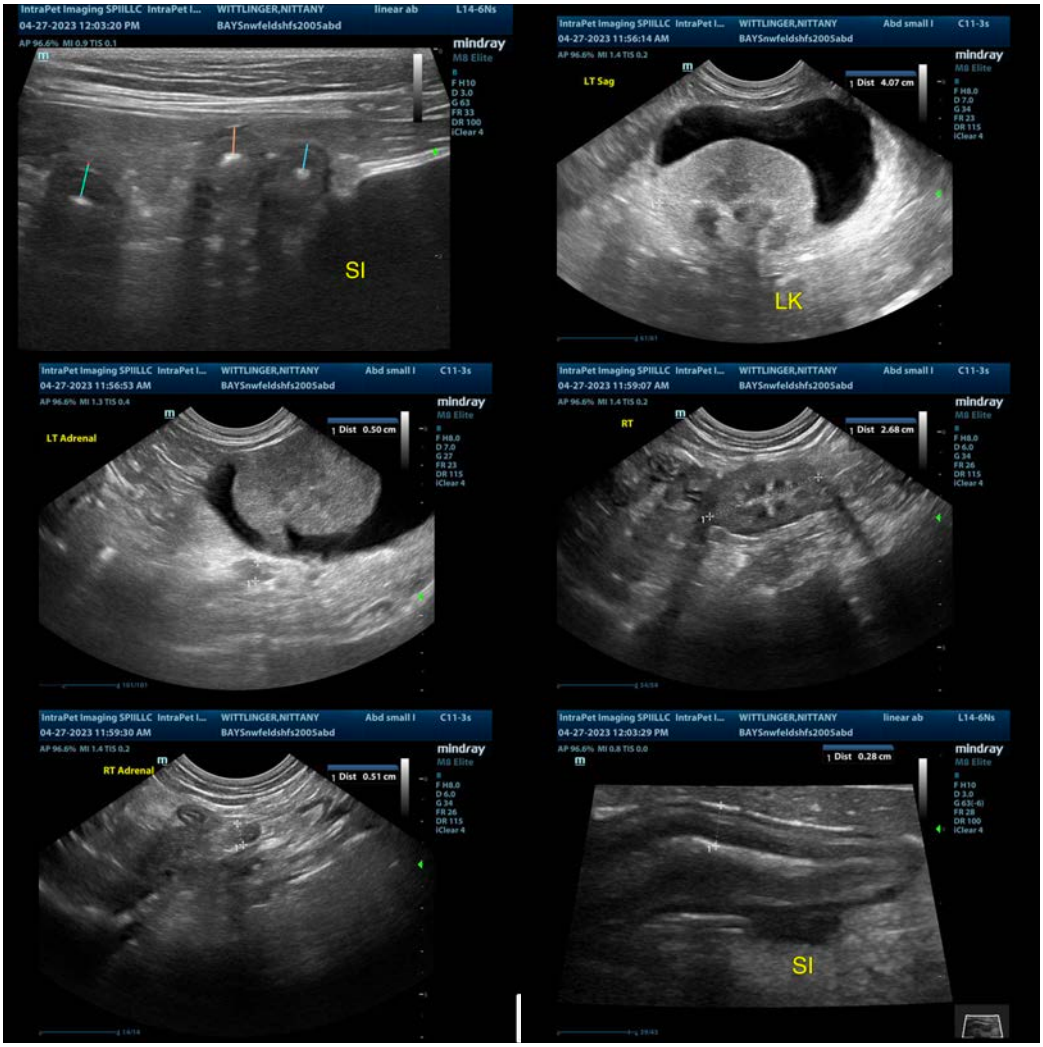
Options moving forward in this individual would be continued monitoring if you feel this is asymptomatic. Additionally, percutaneous drainage can be considered, but the fluid will recur. If drainage is performed,

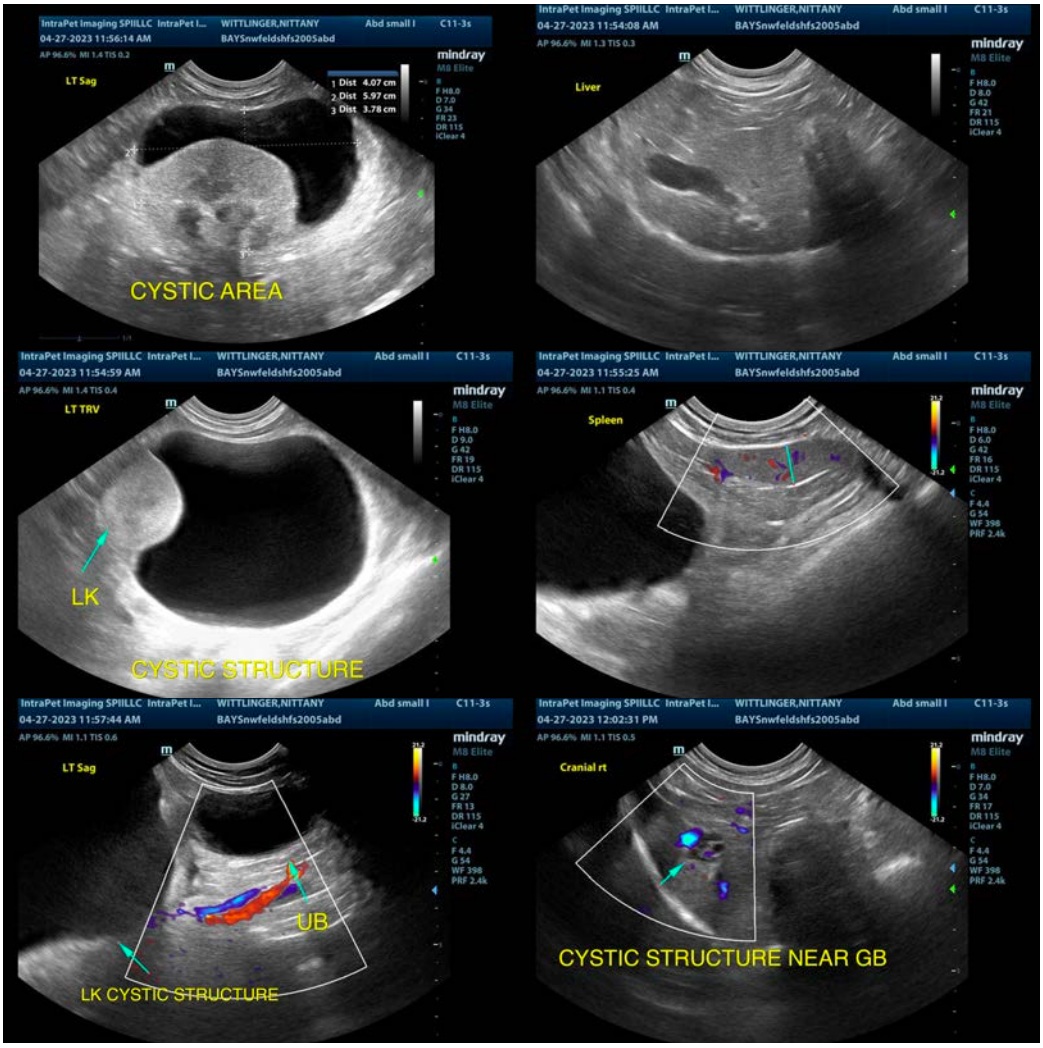
recommend fluid analysis and cytology on the fluid +/- culture. Additionally, urine culture is recommended, as perinephric pseudocysts have been associated with urinary tract infection. The most definitive treatment is surgical, either removal of the cyst or fenestration to allow drainage into the abdomen (recommend consultation with a veterinary surgeon). Nephrectomy is discouraged, as these patients often have significant renal dysfunction.

The small intestine appears subjectively thickened. The diarrhea reported could be unrelated to the renal issues. If surgery is pursued, I would recommend obtaining GI biopsies. Alternately consider:

- Consider a novel protein/hydrolyzed protein diet (exclusively at least 4-6 weeks)
- Consider a GI panel to Texas A&M for evaluation of B12 levels, folate, PLI/TLI etc.. to further evaluate for pancreatic/small intestinal disease.
- Recommend chronic probiotic therapy.

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





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.

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