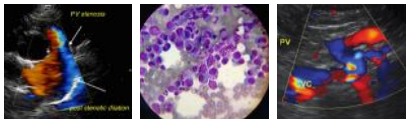
IMAGING PERFORMED BY

IntraPet.com



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

DATE

2/13/23

PATIENT

Vyssa Johnson

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

3/6/06

WEIGHT

9.3 Pounds

INTERPRETED BY

Beth Johnson, DVM DACVIM

HOSPITAL NAME

Animal Emergency Hospital

REFERRING VET

Dr. Martinoli

INVOICE

21086

PRESENTING CLINICAL SIGNS

History: Seen initially on 2/6/23- for ataxia, large bladder- history of crystals; had not urinate; large painful bladder noted- when sedate- u-cath went in easily; kept u-cath in place for 24 hours then pulled; bloodwork- mild increase in SMDA, no stones on xrays, improved and went home. went home on omeprazole and maropitant. re-presented on 2/11/23 with a 3 days history of vomiting, NI and weight loss. initial xrays- thickened intestines with abnormal gas pattern; CBC- anemia noted; repeat films- improved - ate once; but did not eat again

Current Medications: omeprazole, maropitant, metronidazole
Lab Results: See attached.
Radiographs: increase Gas in SI , ileus vs fb vs mass vs other
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

Urinary bladder is subjectively mildly over-distended with both anechoic contents, as well as a large amount of suspended echogenic debris. No discrete cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

Kidneys are overall normal in size and shape with smooth peripheral margination. A normal 1:3 cortex to medulla ratio is maintained. The medulla and cortices are uniform in texture with some mild increased cortical echogenicity and mild loss of corticomedullary distinction, expected in this age patient. There is no evidence of mineral or infarcts observed. The left kidney measures 4.14 cm. The right kidney measures 4.59 cm. Very mild pyelectasia is noted bilaterally.

Adrenal Glands

Left adrenal gland is normal in size (0.44 cm), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Right adrenal gland is normal in size (0.44 cm), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Spleen

Spleen is subjectively large in size with subtly scalloped or undulating capsular contour. Parenchyma is normal in echogenicity with a mildly coarse/heterogenous echotexture. No focal nodules or masses are observed. Splenic vasculature appears normal.

Liver

Liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.

Gastrointestinal

The visible stomach wall is normal in thickness and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent. The visible small intestine demonstrates areas of thick muscularis layer relative to mucosa (disruption of the normal 1:3 muscularis:mucosa ratio). Small intestinal submucosa is slightly irregular, thick and hyperechoic. Some early or emerging subtle loss of layering can't be ruled out. The lumen of the small intestine is empty, except in the cranial abdomen, there is a focal bowel loop with a subtle echogenic interface and distal progressively shadowing material, consistent with possible hairball density. No evidence of an obstructive pattern indicating obstruction noted.

The visible colon is normal in wall thickness and layering. Contents are consistent with normal formed feces and gas.

Pancreas

Pancreas is prominent (enlarged) in size, hypoechoic to surrounding tissue and has a mildly irregular undulating contour. Parenchyma is coarse with mixed echogenic remodeling noted. Pancreatic duct dilation is noted.

Free Abdomen

A scant amount of free fluid is noted in the caudal abdomen around the urinary bladder. The mesenteric and sublumbar lymph nodes are enlarged with swollen irregular capsular contour and loss of normal length to width ratio (rounded in shape). Nodes are hypoechoic with loss of normal parenchymal detail.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Scalloped spleen – can be associated with benign or malignant infiltrative disease. Common causes include a reactive spleen secondary to immune stimulus or early infiltrative round cell neoplasia such as lymphoma or mast cell tumor.
- Inflammatory bowel disease (IBD) pattern – Thick muscularis has been reported with infiltrative bowel disease including both benign inflammatory disease as well as infiltrative neoplasia such as lymphoma.
- Aggressive mesenteric and sublumbar lymph nodes – most consistent with infiltrative round cell or metastatic neoplasia. A benign aggressive inflammatory response cannot be ruled out without tissue sampling +/- culture.
- Chronic active pancreatitis

Secondary Findings

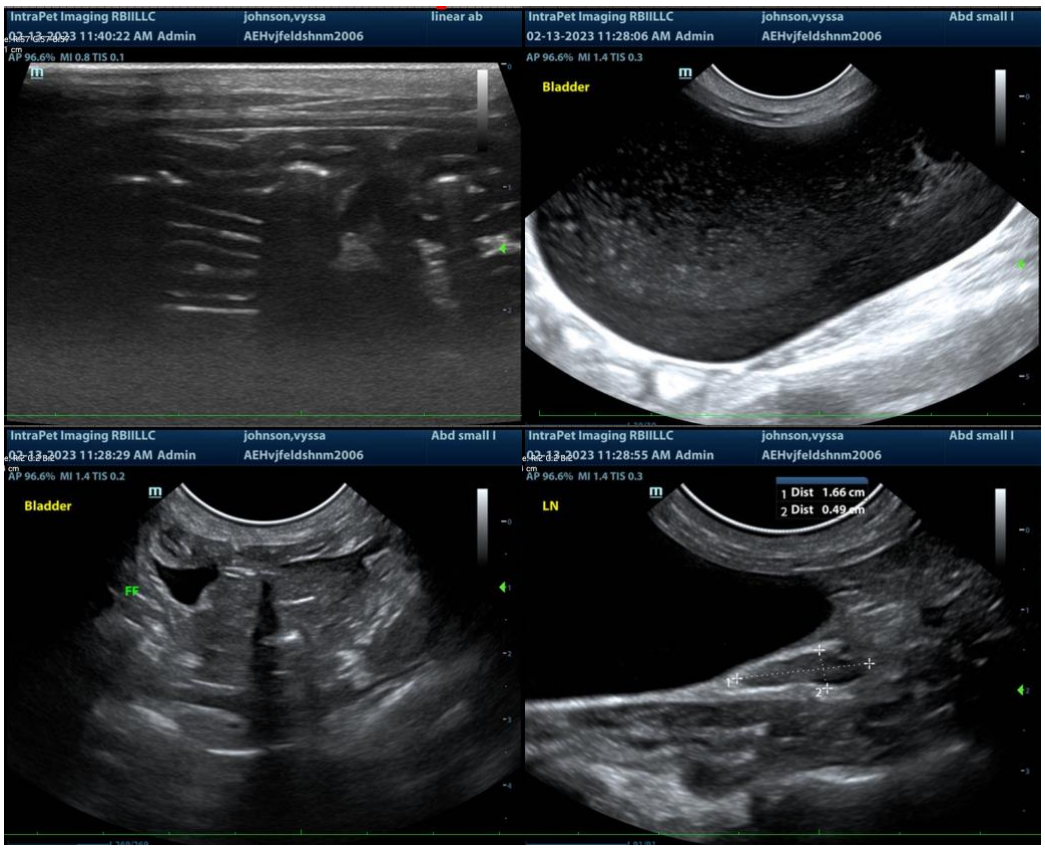
- Large amount of urinary bladder debris in a subjectively mildly overdistended bladder
- Age-related kidney changes with bilateral mild pyelectasia. Differentials for pyelectasia include pyelonephritis, diuresis, congenital malformation or ureteral or lower urinary tract obstruction.

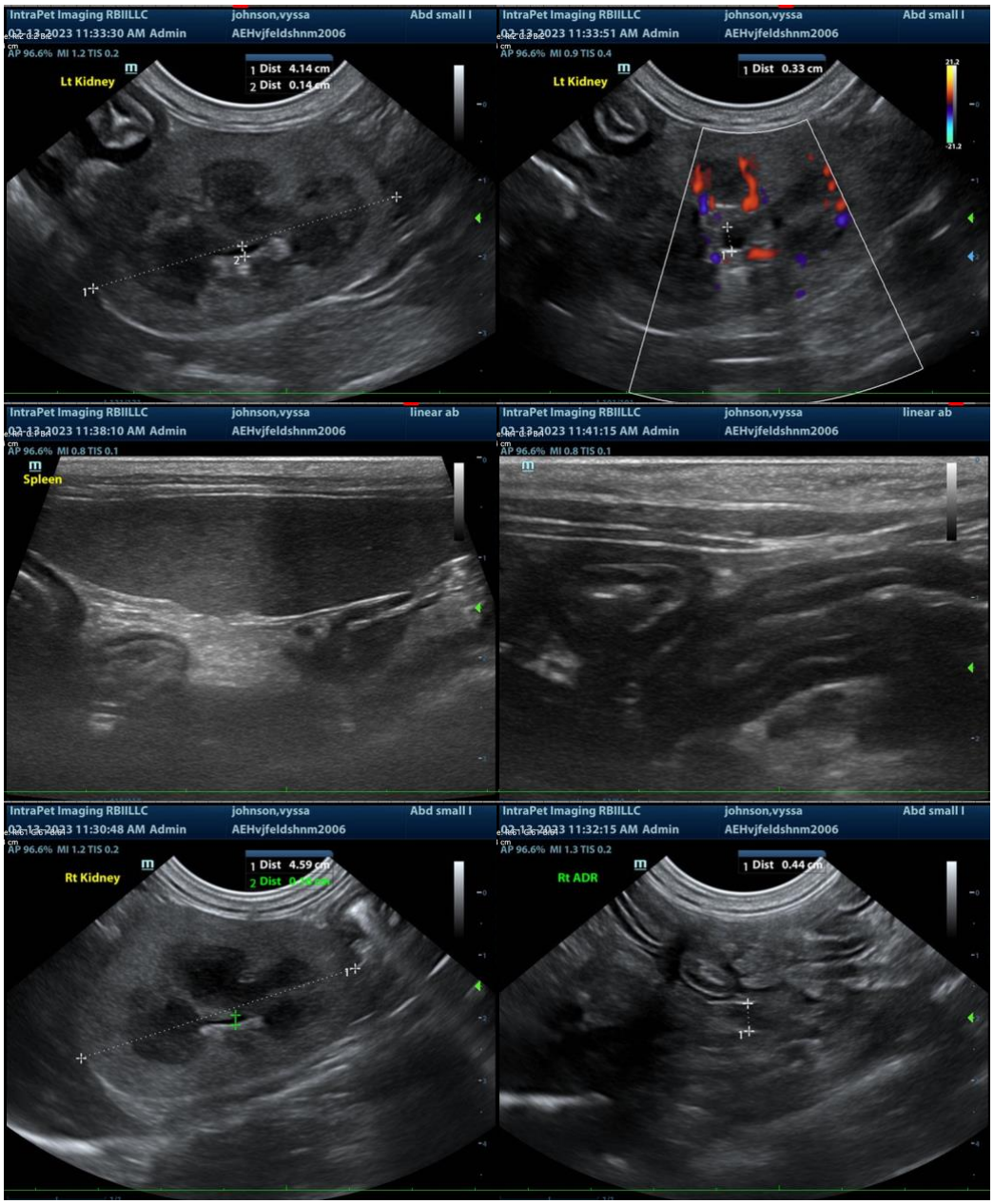
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

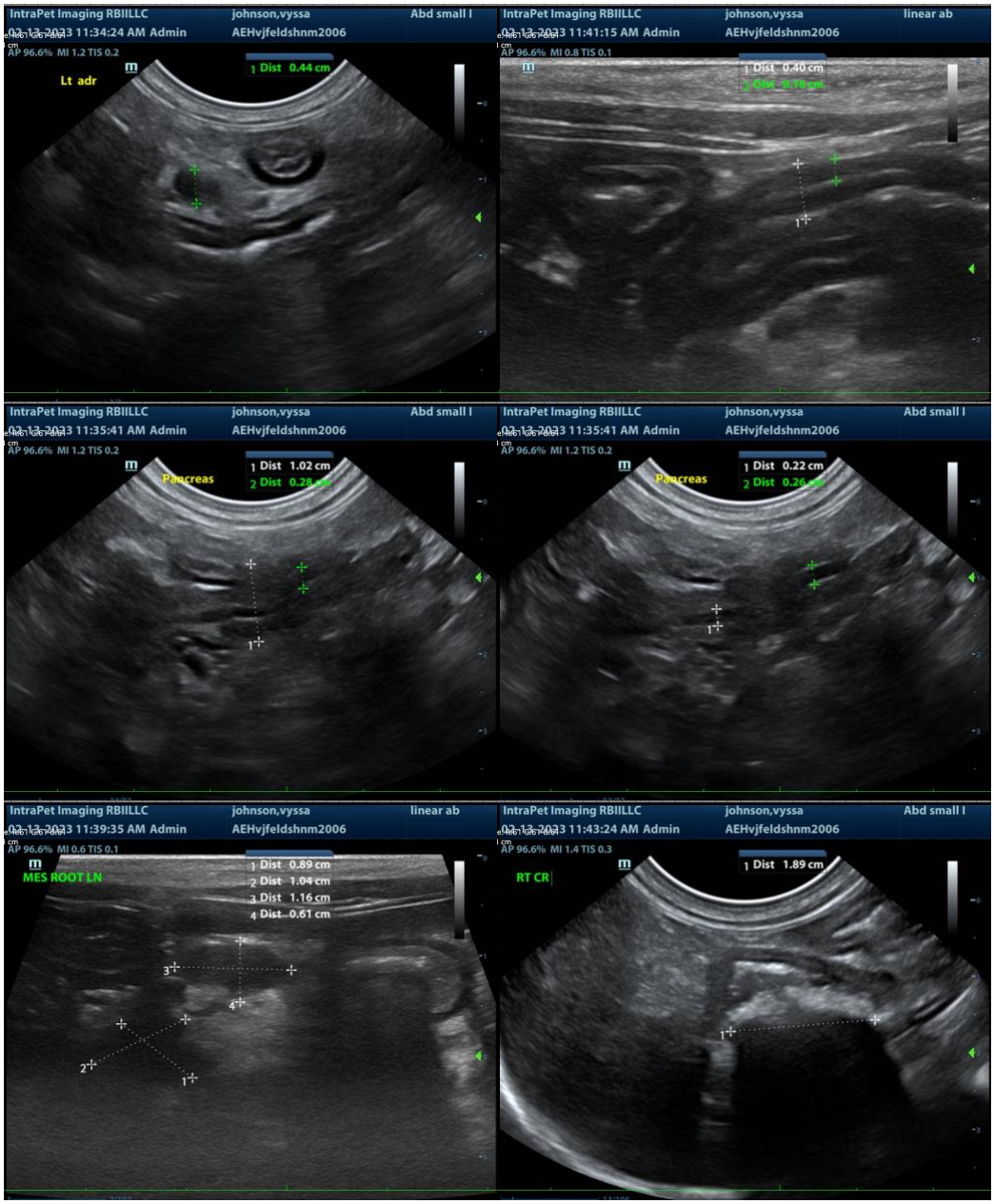
The overdistended urinary bladder, mild pyelectasia and caudal abdominal scant free fluid are all suggestive of urinary pathology and given this patients recent history of suspected urinary blockage, if not recently evaluated, urinalysis and, if indicated based on urinalysis results, urine culture is recommended. If protein is present in an otherwise quiet sediment, protein quantification with a urine protein to creatinine ration is recommended.

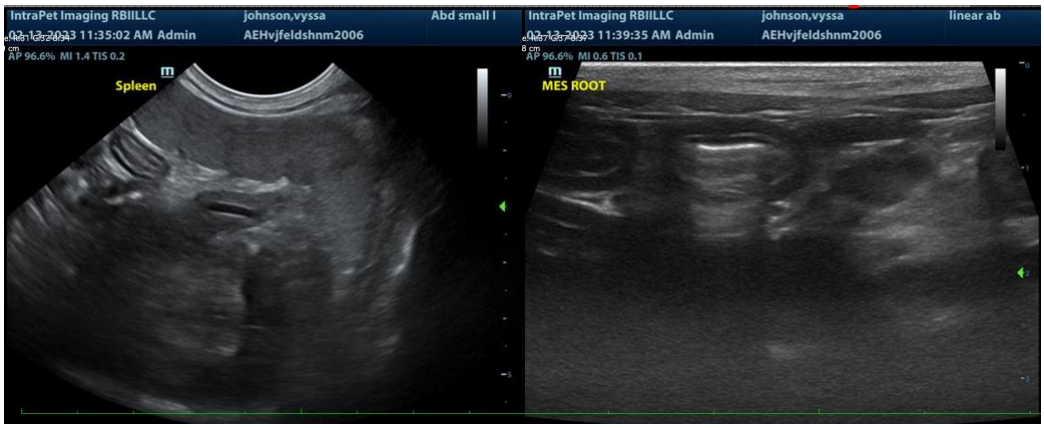
The bowel changes are consistent with an infiltrative bowel disease, likely contributing to the reported gastrointestinal signs, and given the concurrent splenic and lymph node pathology, infiltrative neoplasia should be ruled out. Therefore, fine needle aspirate of the spleen and enlarged lymph nodes is recommended if patients coagulation status is appropriate. If a diagnosis is not obtained cytologically, ideally biopsies of the GI tract, being sure to include ileum, if possible, would need to be considered to definitively diagnose and therefore manage the suspected infiltrative bowel disease.

The suspected hairball foreign material in the small intestine does not appear obstructive, however, this finding should be monitored if clinical signs cannot be resolved medically and/or progress.




IntraPet Imaging RBIILLC
johnson,vyssa
Abd small I
AEHvjfeldshnm2006
AP 96.6% MI 1.2 TIS 0.2
Lt Kidney
1 Dist 4.14 cm
2 Dist 0.14 cm
IntraPet Imaging RBIILLC
johnson,vyssa
Abd small I
AEHvjfeldshnm2006
AP 96.6% MI 0.9 TIS 0.4
Lt Kidney
1 Dist 0.33 cm
IntraPet Imaging RBIILLC
johnson,vyssa
linear ab
AEHvjfeldshnm2006
AP 96.6% MI 0.8 TIS 0.1
Spleen
IntraPet Imaging RBIILLC
johnson,vyssa
linear ab
AEHvjfeldshnm2006
AP 96.6% MI 0.8 TIS 0.1
IntraPet Imaging RBIILLC
johnson,vyssa
Abd small I
AEHvjfeldshnm2006
AP 96.6% MI 1.2 TIS 0.2
Rt Kidney
1 Dist 4.59 cm
IntraPet Imaging RBIILLC
johnson,vyssa
Abd small I
AEHvjfeldshnm2006
AP 96.6% MI 1.3 TIS 0.2
Rt ADR
1 Dist 0.44 cm


IntraPet Imaging RBIILLC
johnson,vyssa
Abd small I
AEHvjfeldshnm2006
AP 96.6% MI 1.2 TIS 0.2
Lt adr
1 Dist 0.44 cm
IntraPet Imaging RBIILLC
johnson,vyssa
linear ab
AEHvjfeldshnm2006
AP 96.6% MI 0.8 TIS 0.1
1 Dist 0.40 cm
IntraPet Imaging RBIILLC
johnson,vyssa
Abd small I
AEHvjfeldshnm2006
AP 96.6% MI 1.2 TIS 0.2
Pancreas
1 Dist 1.02 cm
2 Dist 0.28 cm
IntraPet Imaging RBIILLC
johnson,vyssa
Abd small I
AEHvjfeldshnm2006
AP 96.6% MI 1.2 TIS 0.2
Pancreas
1 Dist 0.22 cm
2 Dist 0.26 cm
IntraPet Imaging RBIILLC
johnson,vyssa
linear ab
AEHvjfeldshnm2006
AP 96.6% MI 0.6 TIS 0.1
MES ROOT LN
1 Dist 0.89 cm
2 Dist 1.04 cm
3 Dist 1.16 cm
4 Dist 0.61 cm
IntraPet Imaging RBIILLC
johnson,vyssa
Abd small I
AEHvjfeldshnm2006
AP 96.6% MI 1.4 TIS 0.3
RT CR
1 Dist 1.89 cm



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.

Beth Johnson, DVM DACVIM
Beth.Johnson@SonoPath.com