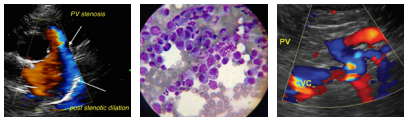
IMAGING PERFORMED BY

IntraPet.com



SonoPath
Clinical Sonography & Telecytology
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DATE

3/14/23

PATIENT

Crowley Watkins

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

5/1/19

WEIGHT

13.2 Pounds

INTERPRETED BY

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

HOSPITAL NAME

Homeward Bound

REFERRING VET

Dr. Vance

INVOICE

45879

PRESENTING CLINICAL SIGNS

Has blocked multiple times. When he does his HCT drops significantly. AEH recommended to check for any inciting causes.

Current Medications: None listed.
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 is diffusely severely thickened, measuring up to 0.73 cm. The mucosal surface of the gallbladder wall appears slightly irregular. In the dorsal apical region, there is hyperechoic shadowing material, most consistent with small stones/mineralizations, or even mineralized bladder wall. The area of the trigone, ureteral papillae and proximal urethra appear free of any mass lesions or calculi.

The left kidney has a normal shape and size (4.11 cm). Overall echogenicity is normal with adequate 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.

The right kidney has a normal shape and size (4.19 cm). Overall echogenicity is normal with adequate 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 0.46 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 0.44 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 (0.85 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. 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 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 (between 0.13-0.38cm in wall thickness) and the jejunum measured as normal (between 0.15-0.36cm.) 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 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.

ULTRASONOGRAPHIC FINDINGS

- Severely thickened urinary bladder wall with intraluminal mineralizations – Findings are most consistent with severe cystitis (bacterial versus sterile) and possible stones/sandy debris/mineralization of the urinary bladder wall.

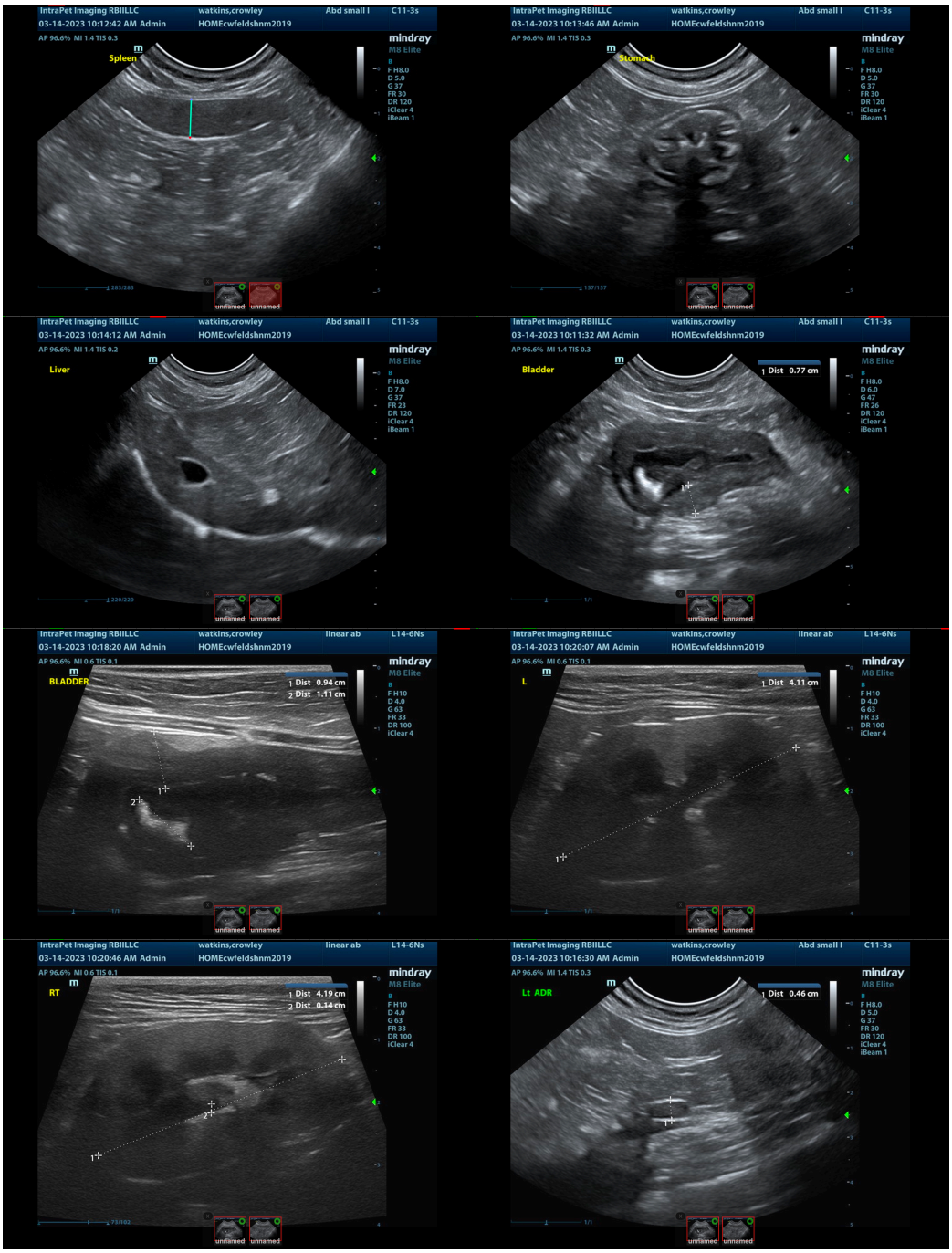
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

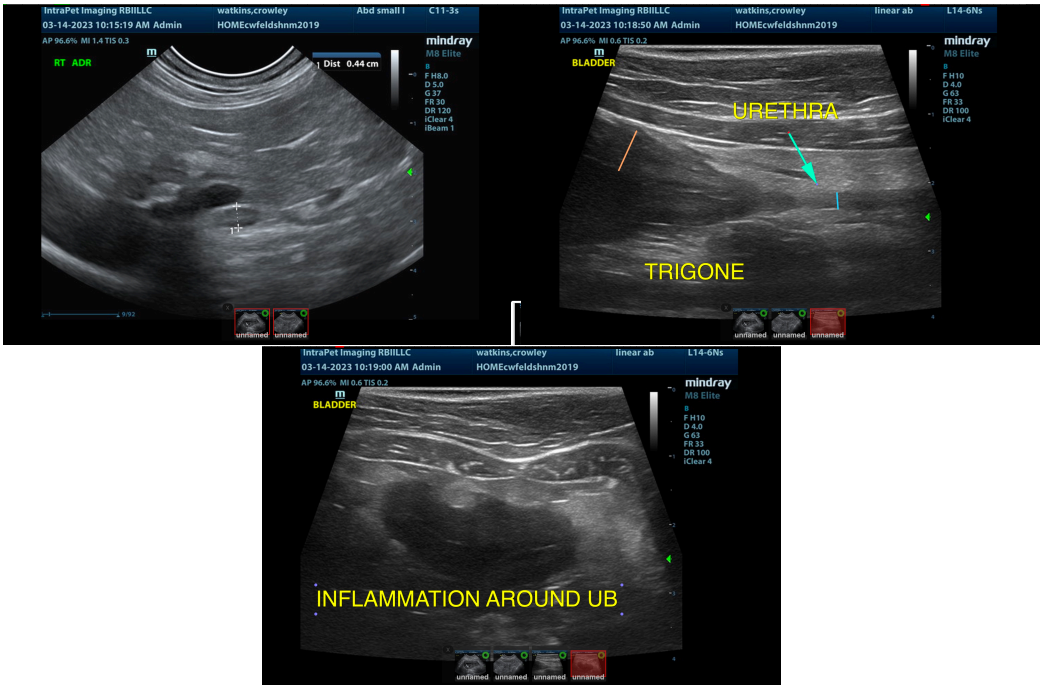
The urinary bladder wall is severely thickened and the mucosal surface is slightly irregular. These changes would be most consistent with cystitis. This could represent bacterial cystitis or sterile cystitis/FIC. Correlate these findings with abdominal radiographs to try and better determine the size and nature of the mineralizations observed. This could be consistent with small stones, although accumulations of sandy debris or even wall mineralizations can appear similar. These are my general recommendations for further evaluation of a thickened urinary bladder wall:

- Urinalysis and culture are recommended.
- Due to the diffuse thickening of the urinary bladder wall, interstitial cystitis would be suspected (if culture is negative)
- Treatment of FIC can be frustrating as it is a waxing and waning disease. Treatment strategies vary and there is no “one fits all” approach. There is currently no cure for FIC. Goals of therapy include reduction of severity and duration of clinical signs during an acute episode; increasing the interval between episodes; and decreasing severity of signs in cats with persistent FIC. Approximately 85% of cats will experience clinical improvement with or without therapy.
- Numerous therapies can be considered including: diet, multimodal environmental modification, analgesics, anti-inflammatories, anti-anxiety medications etc..

- Close observation is warranted as some cats do experience life-threatening urinary obstruction.
- If symptoms are worsening re-evaluation with ultrasound should be considered.

If large focal stones are suspected and there is no bacterial infection present, a cystotomy could be considered for stone removal. If a cystotomy is performed, consider obtaining biopsies of the urinary bladder wall for culture and histopathology.





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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