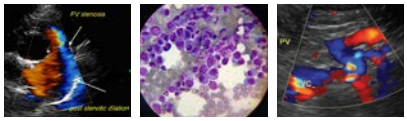
IMAGING PERFORMED BY

IntraPet.com



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

DATE

1/19/23

PATIENT

Lulu Bishop-Johnson

SPECIES

Canine

BREED

Bichon Frise

SEX

Spayed Female

AGE

8/8/14

WEIGHT

7.17 kg

INTERPRETED BY

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

HOSPITAL NAME

Banfield Columbia

REFERRING VET

Dr. Landon

INVOICE

44376

PRESENTING CLINICAL SIGNS

Pet is having recurring UTI's and a very active sediment. O decided that she would like a complete abdominal ultrasound rather than just a urinary scan.

Current Medications: Clavamox.
Lab Results: UA: large amounts of "debris" inc blood cells, Epithelial cells, and debris. Urine C/S: No growth after 2 rounds of abx
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Stephanie Warga RDCS, RVT.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is moderately distended with primarily suspended echogenic debris and some dependent shadowing and sandy debris/small stones present (examples of two calculi measure 0.27 and 0.32 cm). The bladder wall appears mildly thickened and irregular, particularly in the apical ventral aspect of the urinary bladder, measuring at 0.71 cm. The area of the trigone, ureteral papillae, and visible urethra appear free of any thickening or irregularity, but there is sandy debris extending down into the urethra. Echogenic debris of this type can be associated with small crystals, sandy debris, or small calculi. Correlate findings with abdominal radiographs, urinalysis and culture.

The left kidney has a normal shape and size (4.61 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 (4.53 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 0.38 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, 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 <0.7cm 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. 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. Jejunum wall measures 0.27 cm. Duodenum wall measures 0.32 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 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.

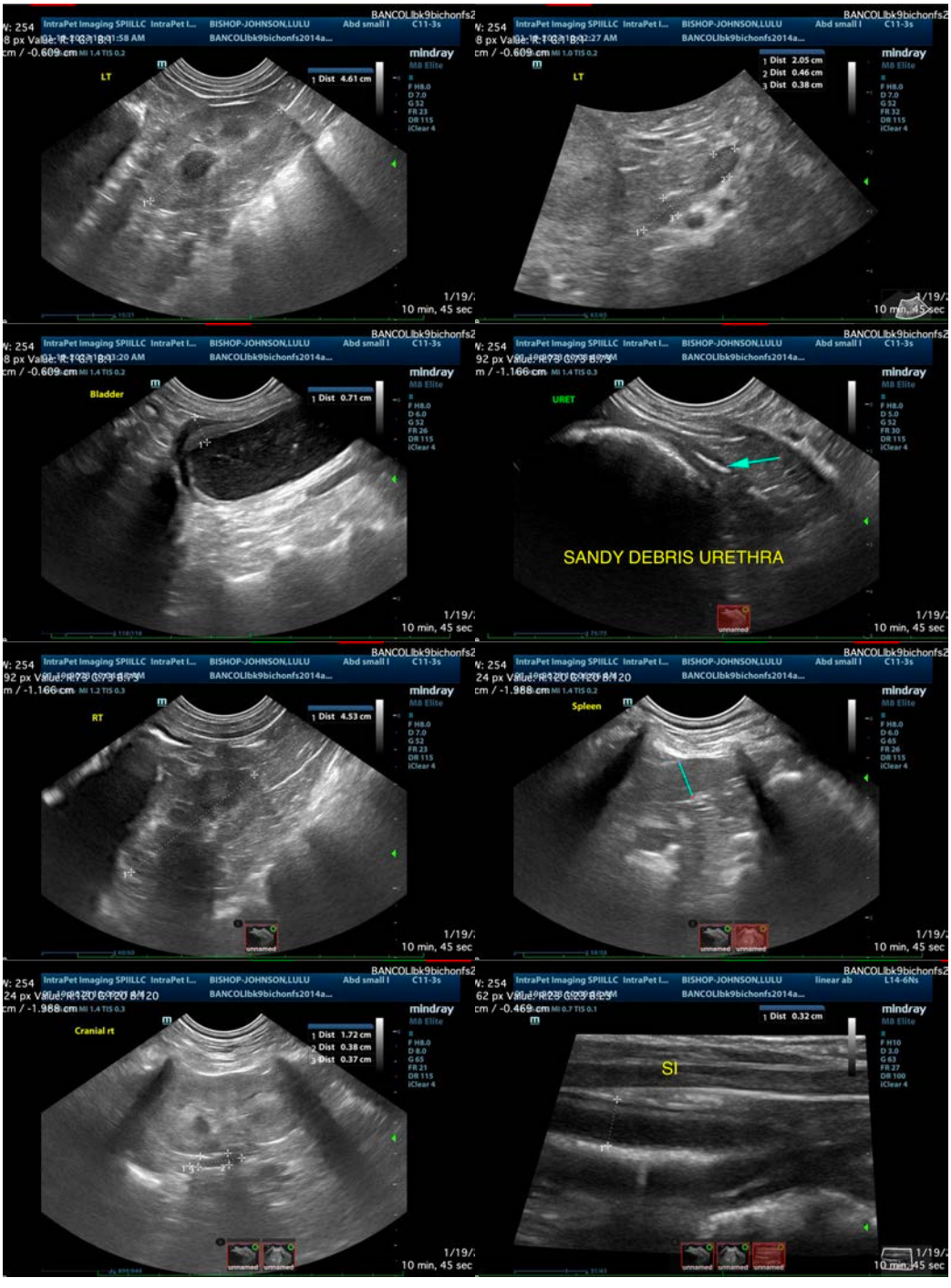
ULTRASONOGRAPHIC FINDINGS

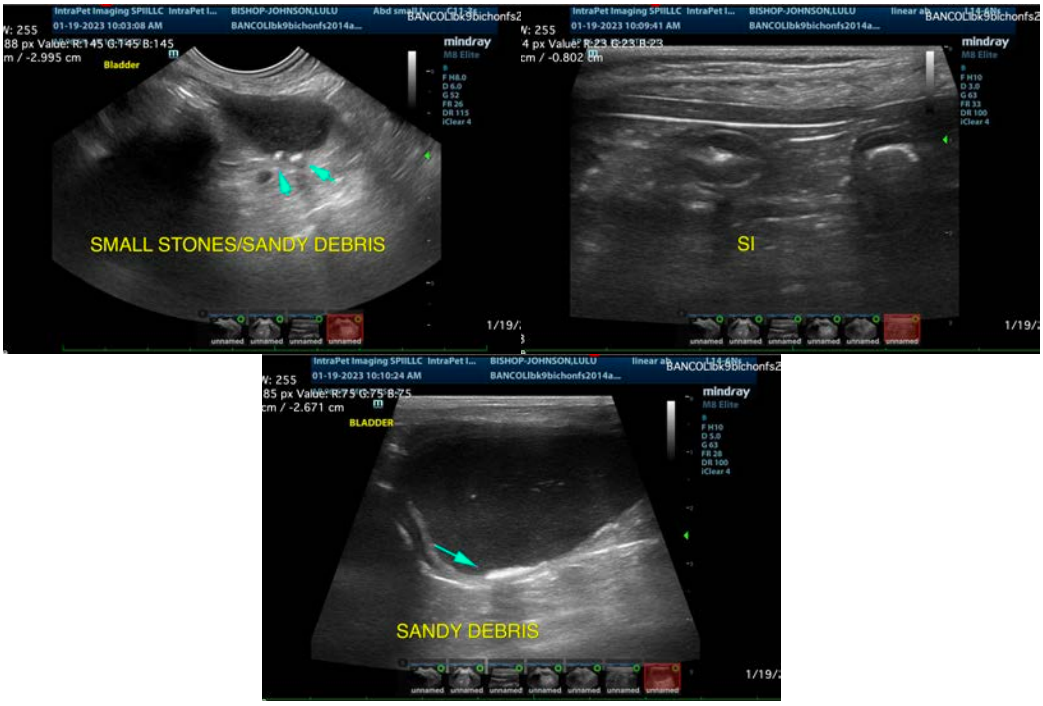
- Mildly thickened irregular urinary bladder wall with dependent sandy debris/small stones extending into the proximal urethra – Findings are most consistent with cystitis and mineralized debris/small calculi. Monitoring of the wall thickening is recommended.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There is suspended echogenic debris and dependent mineralized echogenic debris/sand/small calculi visualized in the urinary bladder. Evaluate a free catch urine sample to try and determine if the type of sandy debris/calculi could be determined. If these are small stones, I suspect they are small enough to pass and could potentially even be sent out for analysis.

The changes in the urinary bladder are most consistent with chronic cystitis type changes, as no focal mass effect is observed, but an underlying neoplastic process cannot be definitively ruled out. If repeat urine cultures are negative, you could consider flushing out the urinary bladder, and even consider a traumatic catheterization at the same time to see if a source for the problem can be identified. If an underlying infection cannot be identified, then this could be consistent with calcium oxalate stones, irritation, etc. Additionally, a cystoscopy could be considered to grossly evaluate these areas, look for any distal anatomic irregularities, and obtain samples for evaluation.


LT
Dist 4.61 cm
LT
Dist 2.05 cm
Dist 0.46 cm
Dist 0.38 cm
Bladder
Dist 0.71 cm
URET
SANDY DEBRIS URETHRA
RT
Dist 4.53 cm
Spleen
Cranial rt
Dist 1.72 cm
Dist 0.38 cm
Dist 0.37 cm
SI
Dist 0.32 cm
mindray
10 min, 45 sec



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)
kathleen.sennello@sonopath.com