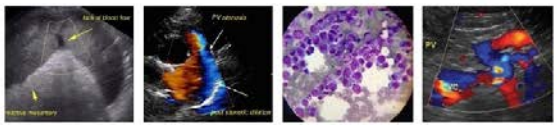
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com



THE FOCAL ZONE
IMAGING PERFORMED BY
289-808-2608 info@thefocalzone.com

PATIENT

Gill Kadechuk

SPECIES

Feline

BREED

DLH

SEX

Neutered Male

AGE

14 Years

WEIGHT

4.81 kg

INTERPRETED BY

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

IMAGING PERFORMED BY

Crystal Hill

HOSPITAL NAME

Upper Canada AH

REFERRING VET

Dr. Dickie

INVOICE

45887

DATE

3/14/23

PRESENTING CLINICAL SIGNS

Presented for straining in Oct 22. Pain on rectal palpation and weight loss noted of .7kg now since that visit in Oct. Otherwise PE WNL. Has started Gabapentin 50mg BID today. Concerns for cause of new azotemia.

Abnormal PE/Chem/CBC/UA Results: Please see attached lab work and rads. Rads Oct 22 showed 5 less than 1mm diameter cystoliths. 2 cystoliths were found on the prepuce and sent to lab, analysis returned as CaOx stones. Bloodwork Azotemia, BUN 14.7, Creatinine 271, SDMA 18, Na 166 U/A hematuria, isosthenuria, no bacteria or crystals, Culture and Sens pending.

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, or masses. In the dependent portion of the urinary bladder, there is a small amount of dependent hyperechoic, lightly shadowing debris, most consistent with sandy debris/small stones.

The left kidney has a normal shape and size (3.9 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.

The right kidney has a normal shape and size (4.56 cm) with significant pyelectasia at 0.54 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. The proximal ureter is dilated at 0.37 cm and cannot be followed beyond approximately 1.5 cm from the kidney. There is a small nephrolith visualized within the renal pelvis, measuring at 0.30 cm, which is not obviously obstructive at this time. There is no evidence of 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 0.48 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.

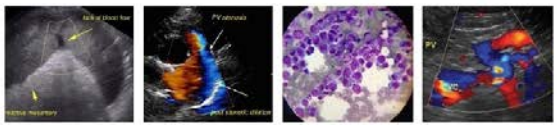
Spleen

The spleen is subjectively normal in size (0.73 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 0.97 cm hyperechoic nodule visualized within the parenchyma.

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



THE FOCAL ZONE
IMAGING PERFORMED BY
289-808-2608 info@thefocalzone.com

PATIENT

Gill Kadechuk

SPECIES

Feline

BREED

DLH

SEX

Neutered Male

AGE

14 Years

WEIGHT

4.81 kg

INTERPRETED BY

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

IMAGING PERFORMED BY

Crystal Hill

HOSPITAL NAME

Upper Canada AH

REFERRING VET

Dr. Dickie

INVOICE

45887

DATE

3/14/23

Two gallbladder lumens are visualized associated with the liver, most consistent with duplicate gallbladder. The gallbladder lumens are moderately distended. The walls of the gall bladders are not thickened and have 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 moderate fluid/ingesta. 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. Jejunum wall measures 0.23 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 hyperechoic around the right kidney.

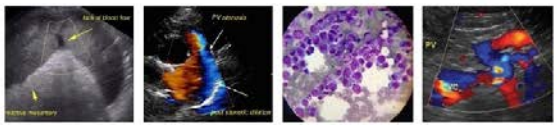
PRIMARY FINDINGS

- Dependent mineralized/sandy debris in the urinary bladder – Findings are most consistent with sandy debris/small stones.
- Decreased corticomedullary distinction in both kidneys – The bilateral renal findings are consistent with age-related change.
- Significant pelvic dilation of the right kidney and a small nephrolith within the regnal pelvis – The visualized nephrolith does not appear obstructive at this time, but it may shift intermittently. Additionally, there could be other stones not clearly visualized, or a stricture just distal to the kidney.
- Hyperechoic nodule in the liver – The significance of this is unclear. This could represent a benign lesion such as hyperplasia, and there are minimal criteria for malignancy at this time, but an underlying neoplastic process cannot be ruled out.

SECONDARY FINDINGS

- Duplicate gallbladder – This is likely an incidental finding at this time.
- Moderate fluid/ingesta within the gastric lumen – Correlate with the feeding history. This could be consistent with a non-fasted patient, delayed gastric emptying, or a pyloric outflow tract obstruction (none observed).

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



THE FOCAL ZONE
IMAGING PERFORMED BY
289-808-2608 info@thefocalzone.com

PATIENT

Gill Kadechuk

SPECIES

Feline

BREED

DLH

SEX

Neutered Male

AGE

14 Years

WEIGHT

4.81 kg

INTERPRETED BY

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

IMAGING PERFORMED BY

Crystal Hill

HOSPITAL NAME

Upper Canada AH

REFERRING VET

Dr. Dickie

INVOICE

45887

DATE

3/14/23

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

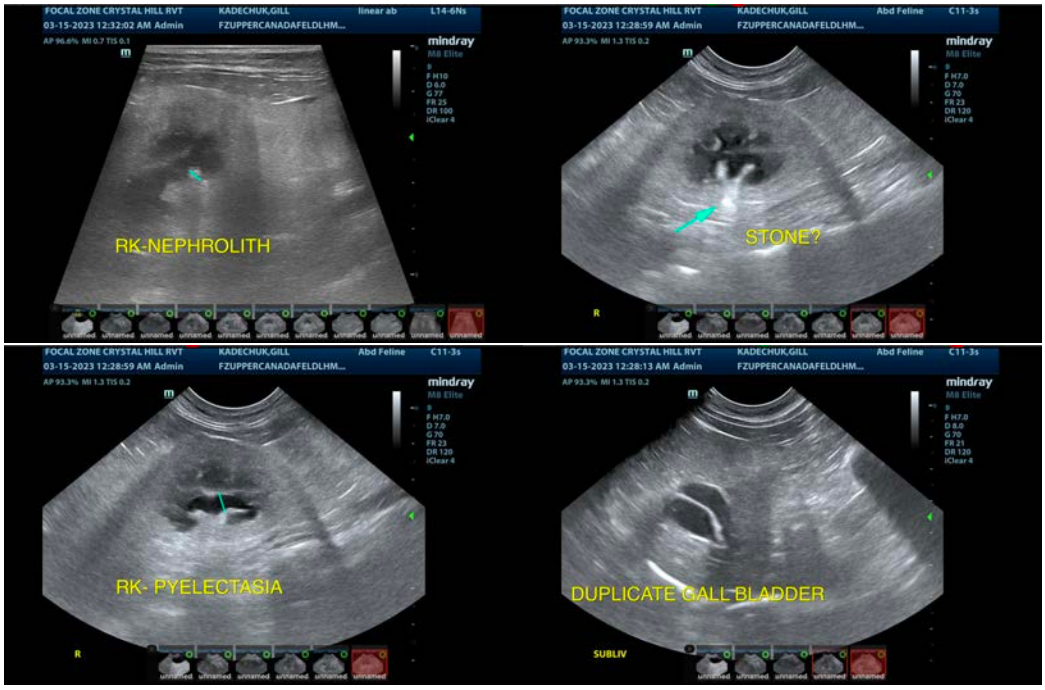
There is a small amount of dependent sandy debris in the urinary bladder. Unfortunately, this type of debris is frustrating, as it can accumulate in the urethra of a male cat and cause issues, but it is often somewhat insubstantial to try and remove via cystotomy. Your plan for a urine culture is good and continued monitoring for lower urinary tract signs.

Additionally, the right kidney appears significantly dilated/very early hydronephrosis(?) with a small nephrolith visualized within the renal pelvis, which at this time does not appear particularly obstructive. My concern would be for possible previous stones and a stricture. Recommend abdominal radiographs, looking for mineralizations along the route of the right ureter. Additionally, you could consider a contrast CT scan, which could identify a stricture, very small stone, etc. If this is not possible, continued monitoring with ultrasound looking for progressive dilation of the kidney is recommended. Additionally, there is hyperechoic mesentery around the kidney, indicating some inflammation, discomfort, etc. Infection or pyelonephritis could also be at play.

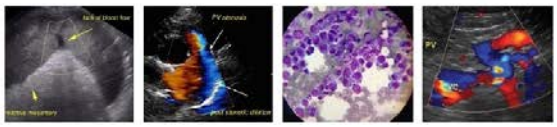
Consider pain medications and nausea medications if not feeling well, as this can be very uncomfortable. Unfortunately, if the patient is azotemic, it is likely that renal function of both kidneys is somewhat compromised, so everything possible should be done to preserve the function of the right kidney.

There is a small hyperechoic nodule visualized within the liver, recommend continued monitoring with ultrasound, as this is unlikely to be easy to aspirate. If a contrast CT scan is performed, this should be evaluated as well.

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



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



THE FOCAL ZONE
IMAGING PERFORMED BY
289-808-2608 info@thefocalzone.com

PATIENT

Gill Kadechuk

SPECIES

Feline

BREED

DLH

SEX

Neutered Male

AGE

14 Years

WEIGHT

4.81 kg

INTERPRETED BY

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

IMAGING PERFORMED BY

Crystal Hill

HOSPITAL NAME

Upper Canada AH

REFERRING VET

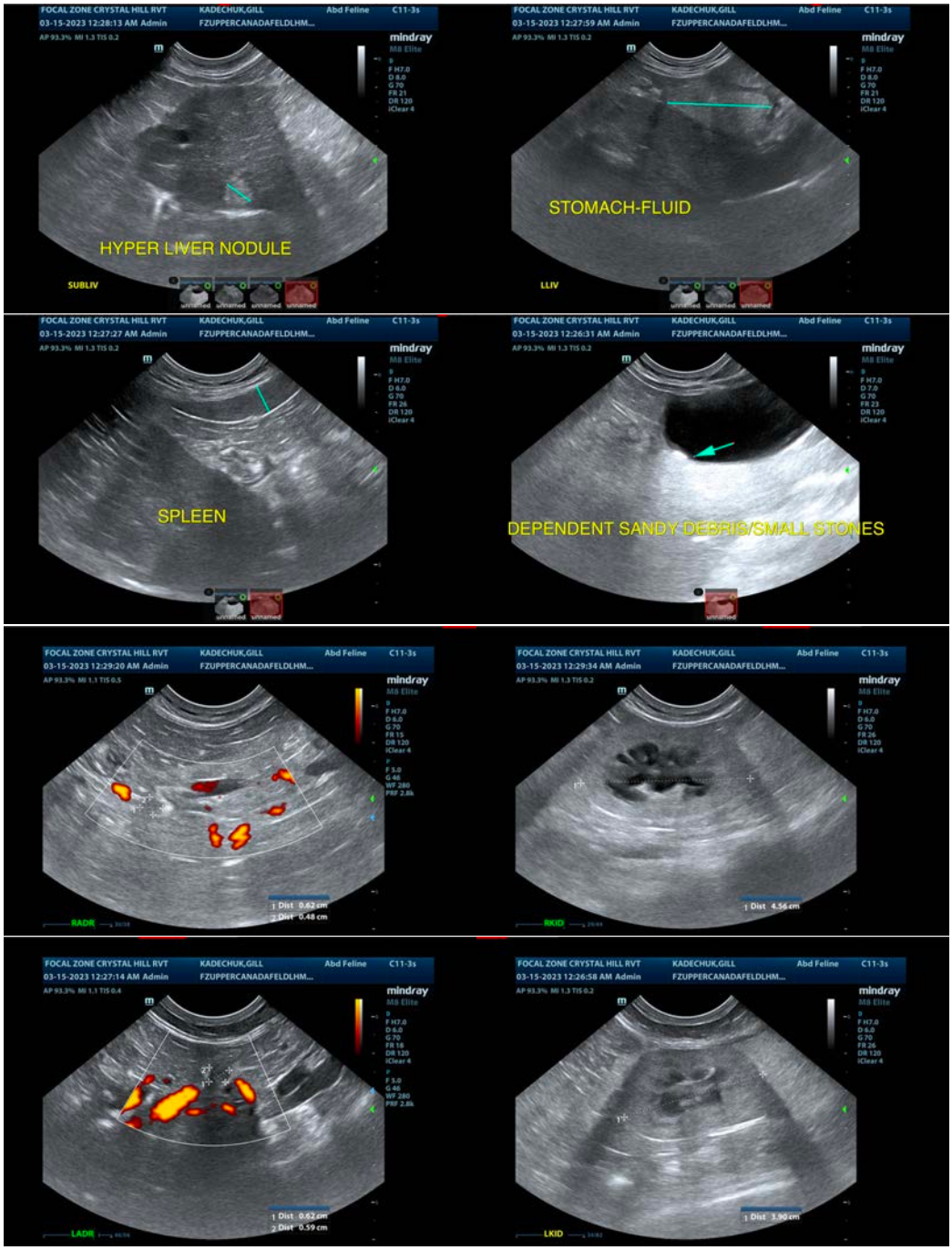
Dr. Dickie

INVOICE

45887

DATE

3/14/23



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