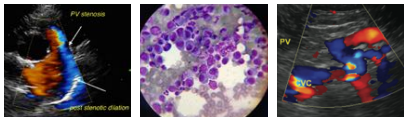
IMAGING PERFORMED BY

IntraPet.com



SonoPath

Clinical Sonography & Telecytology

EDUCATIONAL TELECONSULTATION SERVICES™

1-800-838-4268 info@sonopath.com SonoPath.com

DATE

10/17/22

PATIENT

Kookie Lorenzana

SPECIES

Canine

BREED

Shih Tzu

SEX

Spayed female

AGE

4/5/10

WEIGHT

12.4 lbs

INTERPRETED BY

Eric Lindquist, DMV DABVP, Cert. IVUSS

HOSPITAL NAME

DocSide Veterinary MC

REFERRING VET

Dr. Tierney

INVOICE

40101

PRESENTING CLINICAL SIGNS

Decreased appetite started around June 2022. Liver enzymes increasing starting in 8/2020. Dog getting more restless especially at night possibly more painful or may be dementia , also having an increase in urination.
Gall stones were diagnosed in previous ultrasound in 2019. Having recurrent urinary tract infections and had previous cystotomy in 2019 for urolith
Current Medications: Takes Ursodiol 100mg/ml 0.6ml SID, glucosamine
Gabapentin 50mg BID, Metronidazole 100mg BID, Clavamox 62.5mg BID, Denamarin ADV 120mg, Welactin, Renal Diet
Lab Results: CBC shows moderate leukocytosis char by mod neutrophilia, mild- mod lymphocytosis and moderate monocytosis.
CHM: AST 358 (N<66) was 200 in 09/20/22, ALT 423 (N< 118) was 533 in 09/20/22, ALP 485 (N< 131) was 306 in 09/20/22, All else WNL
UA: USG 1.025, Prot 2+, PH 6.5, Sediment: Rods 26-50/ hpf, RBC 2-3/ hpf, WBC 0-1/ hpf. Dog was started on Clavamox. Urine C&S:
Org = Enterococcus Sensitive to Zeniquin 2.75 mg/ kg PO SID (25 mg by mouth SID) DT: 10-05-22 at 9:59p: CBC shows persistent leukocytosis, neutrophilia, lymphocytosis and monocytosis. CHM shows AST/ ALT and ALP are all still sig elevated. Urine has bacturia and proteinuria
C&S: Enterococcus- usu non pathogenic but since dog is clinical (urinating freq) recc tx. Recc AUS due to high WBC ct, elevated liver enz and pollakiuria. O says pollakiuria has resolved since starting dog back on abx (Clavamox) Clavamox refilled anfd Metro started for poss infectious component to elevated liver enz
Date of Previous IntraPet Ultrasound: 10/2019. See attached.
Sedation: Gabapentin PO, Torbugesic IV.
Stat Report: Not requested.
Imaging Performed By: Stephanie Warga RDCS, RVT.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The **urinary bladder** revealed calculus that measured 0.6 cm and was non-obstructive at the time of the sonogram. Urethral calculi were also noted. No overt masses were noted; however, the mineralization within the urethra could represent dystrophic

The **kidneys** revealed a moderate interstitial nephrosis pattern with corticomedullary mineralization and pelvic mineralization of the right kidney. The right kidney measured 4.66 cm. The left kidney measured 4.04 cm pelvic calculus that measured 0.6 cm.

Adrenal Glands

Both **adrenal glands** were visualized and recognized as having normal shape, size, position and echogenicity for this breed. The phrenic vasculature, glandular echogenicity and detail were unremarkable. Capsule, cortex, and medullary definition were normal for this age patient. The right adrenal gland measured 1.62 x 0.41 cm at the caudal pole and 0.4 cm at the cranial pole. The left adrenal gland measured 1.84 x 0.5 cm at the caudal pole and 0.45 cm at the cranial pole.

Spleen

The **spleen** revealed mixed, hypoechoic expansive nodules. The splenic nodule measured 1.0 x 0.5 cm. The larger nodule measured 1.6 x 1.0 cm.

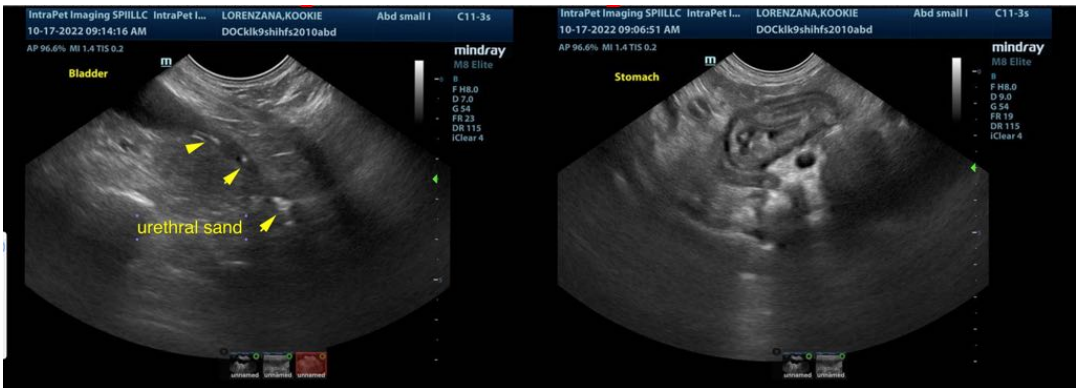
Liver
The **liver** revealed moderate degenerative changes with moderate progression from the prior sonogram. The liver is persistently subnormal in size. Increased portal markings were noted with a moderate amount of remodeling. The gallbladder revealed sand and echogenic wall.

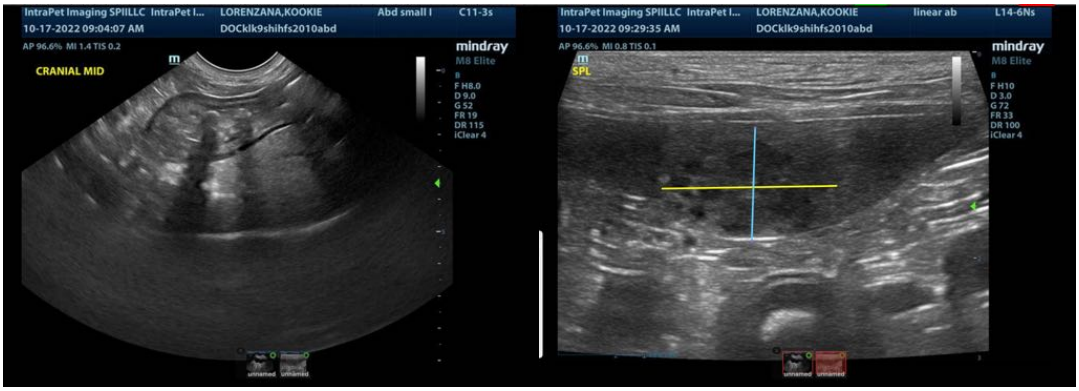
Gastrointestinal
The stomach revealed minor mucosal hypertrophy in the pyloric outflow. A minor amount of residual chyme was noted in the stomach. The muscularis, submucosal and serosal layers are all normal. The small intestine and colon were unremarkable.

Pancreas
The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Some parenchymal remodeling, however, with mild deviation from curvilinear normalcy was observed. Pancreatic duct and capsular irregularities were present consistent with age related changes. If pain upon imaging (+ Murphy sign) was present or if the patient is focally painful in subxiphoid palpation then low-grade smoldering chronic pancreatitis should be suspected.

ULTRASONOGRAPHIC FINDINGS
Bladder calculus.
Persistent splenic nodule.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS
No overt masses were noted; however, the mineralization within the urethra could represent dystrophic mineralization owing to carcinoma, yet no overt mass is present. Cystoscopy would be ideal in this patient. The splenic nodule appears to be stable compared to the prior sonogram. Bile acid profile is warranted prior to any sedation. If vomiting is an issue gastroscopy would be ideal given the mucosal changes. The liver, stomach and kidneys all appear to have progressive changes. The bladder and urethral mineralization/calculi necessitate intervention. I am concerned about long term viability of the liver function in this patient. Bile acids are warranted. The splenic nodule is likely hyperplasia; however, precancerous state cannot be completely ruled out. Another option would involve bile acid profile along with cystotomy, normal and retrograde flushing and splenectomy with liver biopsy for long term management.

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AP 96.6% MI 1.4 TIS 0.2
CRANIAL MID
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IntraPet Imaging SPIILLC IntraPet I... LORENZANA,KOOKIE linear ab L14-6Ns
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mindray
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Spleen
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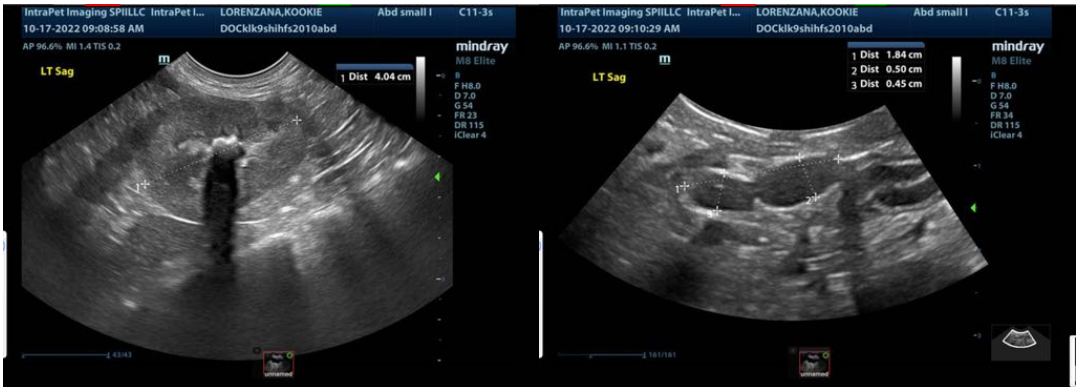
2 Dist 0.59 cm
mindray
M8 Elite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AP 96.6% MI 1.4 TIS 0.2
LT Sag
1 Dist 4.04 cm
mindray
M8 Elite
IntraPet Imaging SPIILLC IntraPet I... LORENZANA,KOOKIE Abd small I C11-3s
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LT Sag
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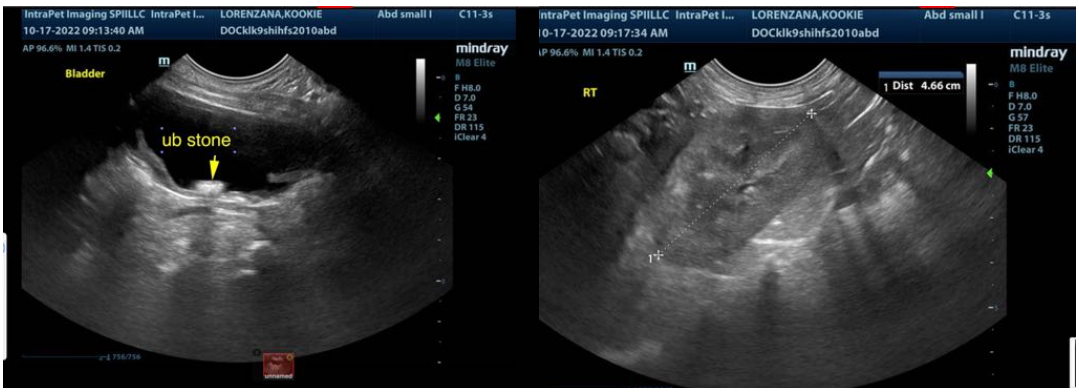
2 Dist 0.50 cm
3 Dist 0.45 cm
mindray
M8 Elite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10-17-2022 09:13:40 AM DOCklk9shihfs2010abd
AP 96.6% MI 1.4 TIS 0.2
Bladder
ub stone
mindray
M8 Elite
IntraPet Imaging SPIILLC IntraPet I... LORENZANA,KOOKIE Abd small I C11-3s
10-17-2022 09:17:34 AM DOCklk9shihfs2010abd
AP 96.6% MI 1.4 TIS 0.2
RT
1 Dist 4.66 cm
mindray
M8 Elite

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.

Eric Lindquist, DMV, DABVP, Cert. IVUSS, CEO of SonoPath.com
Eric.Lindquist@SonoPath.com