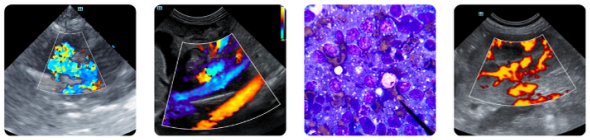


PATIENT

Cookie Koo

SPECIES

Canine

BREED

Shih Tzu X

SEX

FS

AGE

8 years

WEIGHT

6 kg

INTERPRETED BY

Tam Mengine, DVM, DABVP (canine/feline practice)

IMAGING PERFORMED BY

Dr. Gira

HOSPITAL NAME

Willow Park AC

REFERRING VET

Dr. Lori Keeler

INVOICE

10887

DATE

12/5/2025

PRESENTING CLINICAL SIGNS

Senior screen showed elevation of ALP 251 and Ca Ox Crystals in urine .

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is moderately distended with anechoic urine. The ureteral papillae, trigone and pelvic urethra are of normal appearance, and the ureters are not visible (normal). There are multiple small shadowing uroliths, as well as mineralized sand noted within the bladder lumen, trigone, and proximal urethra. The bladder wall is normal. No masses are noted. Urethra visualized to 4.0 cm

Both kidneys exhibit adequate corticomedullary differentiation. There are multiple non-obstructive nephroliths present within the renal medulla and pelvis of both kidneys. Infarcts are seen within the renal cortex of the right kidney. There is no evidence of pyelectasia or hydronephrosis. The proximal ureters are not visible (normal). The left kidney is 4.3 cm in length. The right kidney is 3.6 cm in length.

Adrenal Glands

The adrenal glands are both identified in their normal locations. They are normal in size and shape with appropriate parenchymal echogenicity and normal phrenic vasculature. Left adrenal measures 4.2 mm at the cranial pole and 5.2 mm at the caudal pole. Right adrenal measures 5.4 mm at the cranial pole and 4.5 mm at the caudal pole.

Spleen

The spleen is of appropriate size and has a normal, homogenous parenchyma with a smooth, continuous capsular surface. The splenic vasculature is normal with no evidence of congestion or thrombosis, and blood flow through the splenic hilus appears normal.

Liver

The liver is diffusely hyperechoic and subjectively enlarged, with rounded margins and a homogenous echotexture. The portal and hepatic vasculature are of normal size and appearance with no evidence of congestion or thrombosis.

The gallbladder is moderately distended with anechoic contents. The wall was thin and continuous with no focal lesions. The cystic and common bile ducts are normal / not visible.

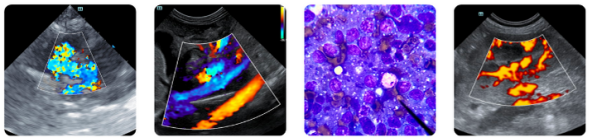
Gastrointestinal

The stomach is moderately distended with gas. The gastric wall is 2.2 mm with normal deviations due to rugal folds, and exhibits appropriate wall layering. The pylorus is of normal appearance.

The visualized portions of the duodenum, jejunum, and ileum are of normal thickness with intact wall layering that exhibits the appropriate 1:3 muscularis to mucosa ratio. Intestinal motility appears normal.

The visible portions of the colon are of normal thickness, 1.0 mm, with intact wall layering. The ileocecal junction was visualized and appears normal.

Pancreas



SonoPath.com info@sonopath.com 1.800.838.4268

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The areas of the limbs and body of the pancreas are isoechoic to the surrounding mesenteric fat, with normal capsular appearance. There is no evidence of peripancreatic inflammation. The pancreatic duct appears normal.

Free Abdomen

There is no evidence of free fluid within the peritoneal cavity. The omentum and intra-abdominal fat are of appropriate echogenicity. Enlarged abdominal lymph nodes are not observed. The aortic trifurcation has normal blood flow with no evidence of thrombosis.

PRIMARY FINDINGS

- Bilateral nephrolithiasis and bladder stones, and sand.
- Diffusely hyperechoic rounded liver.

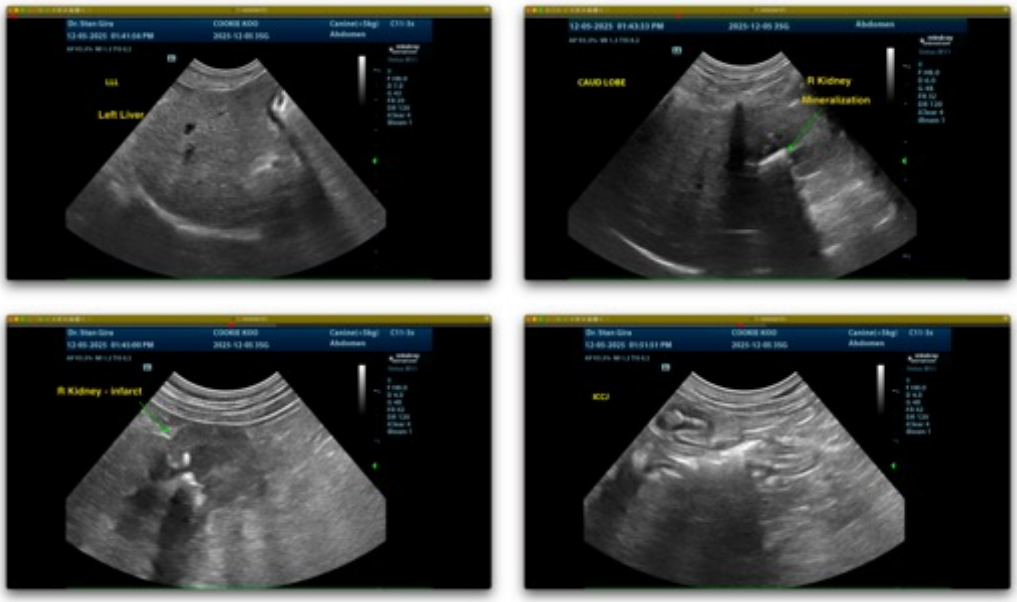
SECONDARY FINDINGS

- Right renal infarct, which is likely an incidental finding.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The appearance of the liver is typical of a benign reactive hepatopathy. While biopsy would be needed for definitive diagnosis, given the mild elevation in ALP without elevation of other liver values, it is unlikely that there is serious hepatic pathology present.

The presence of calculi within the kidneys, bladder, and urethra suggest chronic nephrolithiasis. While there is no evidence of obstruction at this time, the client should observe for evidence of lower urinary distress which may indicate an obstructive urethralith. Unfortunately, there is no specific cure for chronic nephrolithiasis. A dissolution diet could be considered, but given the calcium oxalate crystals on urinalysis, it is less likely that these stones will be soluble. Cystotomy for stone analysis should be considered, particularly if the patient has any symptoms of lower urinary tract signs. Feeding a diet high in moisture may help minimize kidney stone formation.



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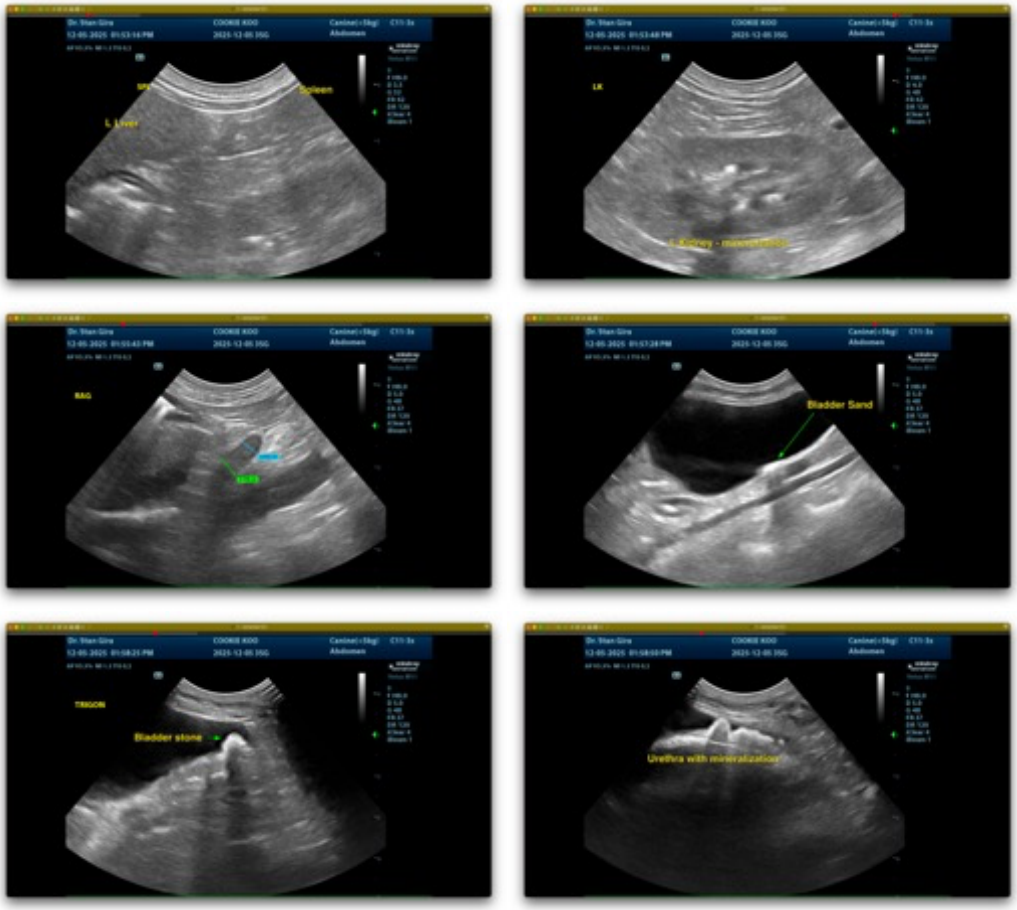

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Tam Mengine, DVM, DABVP (canine/feline practice)

info@SonoPath.com