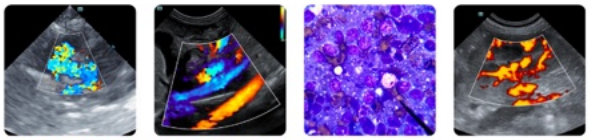


PATIENT

Leia Kelly

SPECIES

Feline

BREED

Domestic Shorthair

SEX

Spayed female

AGE

4 years

WEIGHT

7.4 lbs

INTERPRETED BY

Alicia Angosto Guerrero, DMV, PgDip, MSc.

IMAGING PERFORMED BY

Dr. Carney

HOSPITAL NAME

Smithfield AH

REFERRING VET

Dr. Boe

INVOICE

74948

DATE

4/28/26

PRESENTING CLINICAL SIGNS

History: Few week history of vomiting, losing weight, ADR
Abnormal PE/Chem/CBC/UA Results: Blood work - mild neutrophilia, Creat 1.5, Bun 44, Calcium 12.1, TP 9.8, Alb 8.0, ALT 136 T4 - 1.8

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is normally distended, with a thin and smooth wall. The urine is anechoic and contains a single urolith measuring 1.08×0.62 cm. The bladder neck and proximal urethra appear normal.

The left kidney measures 3.9×2.61 cm, with a cortical thickness of 0.43 cm in the sagittal plane. The right kidney measures 4.16×2.47 cm, with a cortical thickness of 0.44 cm in the sagittal plane. Both kidneys are normal in shape and size for a cat (typically ~3.0–4.5 cm). Cortical thickness is within normal limits (~0.3–0.5 cm). The cortex is isoechoic relative to the liver parenchyma. The corticomedullary ratio is within normal limits, and corticomedullary definition is preserved. A small amount of mineral sediment is present within the renal collecting system. No pyelectasia or hydronephrosis is identified.

Adrenal Glands

Not visualized.

Spleen

Splenic thickness is 0.45 cm. The parenchyma demonstrates normal echogenicity and fine homogeneous echotexture without focal parenchymal abnormalities. The splenic capsule is smooth and regular.

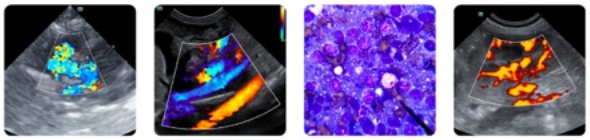
Liver

The liver is subjectively normal in size, with sharp edges and a regular contour. The liver parenchyma looks uniform and isoechoic compared to the falciform fat, with a normal echotexture. No hepatic lymphadenopathy is observed.

The gallbladder lumen is normally distended. The wall is thin and the contents are primarily anechoic. No evident dilation of the cystic duct or common bile duct is observed.

Gastrointestinal

The stomach is empty and folded, with a wall thickness of 1.33 mm and preserved layering (within normal limits). The pylorus measures 2.99 mm, within normal limits. The duodenum measures 1.03 mm and the jejunum 1.75 mm, both within normal limits, with preserved layering. The ileocecal junction is



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not visualized. No evidence of inflammation, ileus, or foreign material is identified. The colon measures 0.78 mm, within normal limits, with a small amount of formed feces.

Pancreas

The pancreas measures 4.54 mm in thickness, which is within normal limits for a cat. The parenchyma is mildly hypoechoic relative to the adjacent omental fat. The pancreatic duct measures 0.63 mm, which is mildly prominent (upper reference typically ~0.5–0.7 mm). No peripancreatic fat hyperechogenicity or fluid is identified.

Free Abdomen

No sonographic evidence of abdominal effusion, peritonitis, or lymphadenomegaly is identified. The iliac trifurcation is normal.

PRIMARY FINDINGS

- Urinary bladder urolith (1.08×0.62 cm)
- Mild mineral sediment within the renal collecting system

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The most significant structural finding is a moderate-sized cystolith, which is clinically relevant and may be associated with the reported biochemical abnormalities, particularly in the context of hypercalcemia. In cats, calcium-containing uroliths (most commonly calcium oxalate) are a key differential, especially when mineral sediment is also identified within the upper urinary tract.

The presence of renal mineral sediment further supports an environment of increased urinary mineral saturation and may indicate an ongoing systemic or metabolic predisposition to urolith formation.

The pancreas shows mild, nonspecific changes, including slight hypoechogenicity and a mildly prominent duct. In cats, these findings are subtle and of uncertain significance. Importantly, feline pancreatitis often lacks overt ultrasonographic changes, and therefore a mild or chronic inflammatory process cannot be excluded.

The gastrointestinal tract is unremarkable, with no sonographic evidence of inflammatory or infiltrative disease. This is important, as it does not provide imaging support for IBD or lymphoma at this time; however, ultrasound cannot exclude early or functional disease.

Taken together with the clinical history (vomiting, weight loss) and laboratory abnormalities (hypercalcemia, hyperproteinemia), the findings suggest a multifactorial process. The cystolith is clinically relevant but unlikely to fully explain systemic signs. The possibility of true hypercalcemia contributing to urolith formation should be considered.

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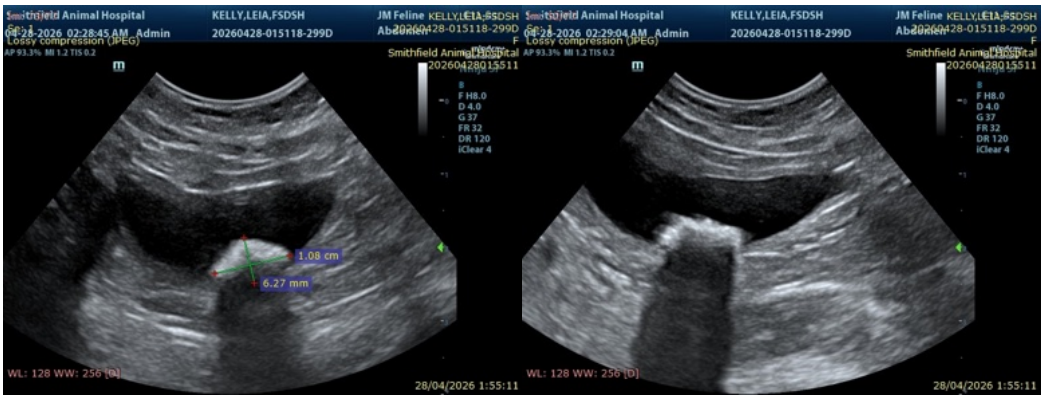
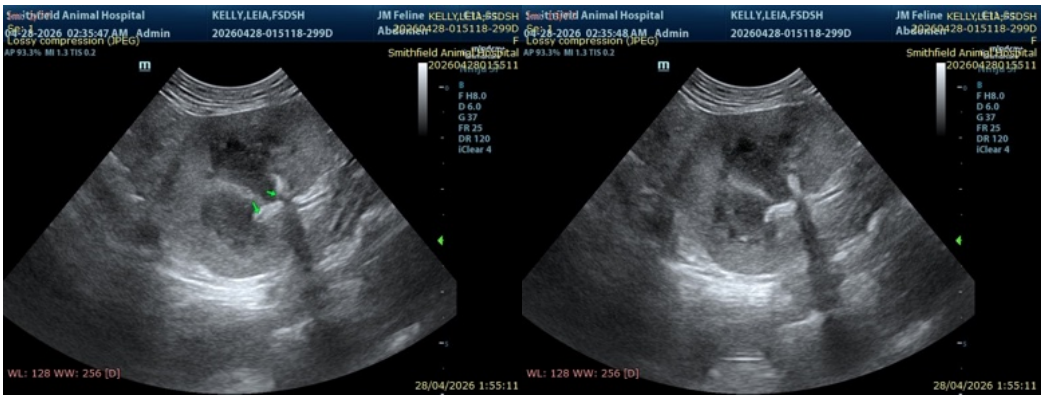
Recommendations

- Further characterization of hypercalcemia is recommended (ionized calcium), as this will help determine whether the elevation is clinically significant and guide differential diagnosis.
- Urinalysis with sediment exam and urine culture, if not recently performed, to assess for crystalluria and concurrent infection.
- The cystolith is clinically significant and urolith analysis (following removal or passage) is recommended to guide long-term management.
- If vomiting and weight loss persist, further investigation of gastrointestinal disease (including cobalamin testing and fPLI) may be warranted despite normal ultrasound findings.

Final diagnostic and therapeutic decisions should be made by the attending veterinarian, who can best integrate these findings with the patient's clinical status.





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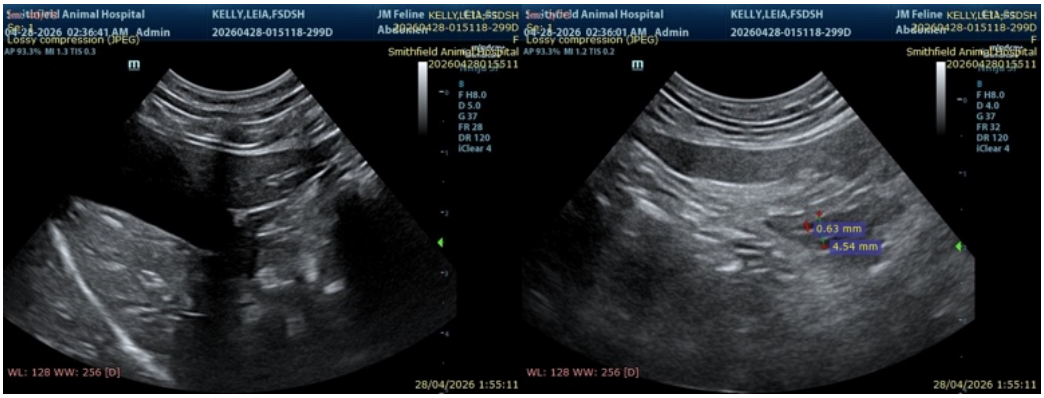

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Alicia Angosto Guerrero, DMV, PgDip, MSc.

info@SonoPath.com