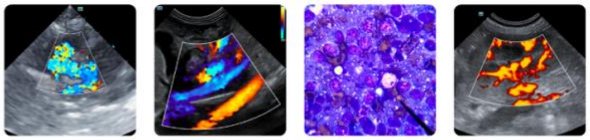


PATIENT

Luke Dwyer

SPECIES

Canine

BREED

Australian Shepherd

SEX

Male

AGE

11

WEIGHT

26 pounds

INTERPRETED BY

Alicia Angosto Guerrero, DMV, PgDip, MSc.

IMAGING PERFORMED BY

Dr. Arch Gordon

HOSPITAL NAME

Coral Ridge Animal Hospital

REFERRING VET

Dr. Arch Gordon

INVOICE

15381

DATE

04/23/26

PRESENTING CLINICAL SIGNS

Panting and owner reports malodorous breath - had dental in March 2026
Historical elevation of ALT in 2019 (497 ul) - seen elsewhere and AUS - unspecified hepatopathy - treated with Metronidazole and Denamarin. Liver values were normal here in 2022, 2023
Alp began slow rise in 2024 - Alt was normal until 4/2026. Noted 2 small uroliths on ultrasound of bladder March 2026- was treated for hematuria and cystitis early this April with Convenia. Prostate is large. Urine collected today cloudy -sperm, bilirubin crystals seen - USG > 1.040
Ph 7.0

Abnormal PE/Chem/CBC/UA Results: ALT - 161 (10-125 ul) ALP 1030 (23 -212 UL)

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is adequately distended. The wall is thin and smooth. The urine is predominantly anechoic. The bladder neck and proximal urethra appear normal. Approximately two small uroliths are present, measuring 3–4 mm, without associated wall thickening or evidence of inflammatory or neoplastic change.

The left kidney is normal in shape and size, measuring 4.59×2.70 cm, with a cortical thickness of 0.49 cm in the sagittal plane.
The right kidney is normal in shape and size, measuring 4.63×2.81 cm, with a cortical thickness of 0.56 cm in the sagittal plane.

Both kidneys: The cortex is isoechoic relative to the hepatic parenchyma. The corticomedullary ratio is normal and corticomedullary distinction is preserved. There is no evidence of pyelectasia, nephrolithiasis, or hydronephrosis.

Prostate

The prostate measures 3.05×2.29 cm and is mildly enlarged for a dog of this size (expected prostatic height approximately <70% of the distance from sacral promontory to pubis on radiographs; ultrasonographically, size is mildly increased subjectively). The parenchyma is homogeneous, without cysts or focal lesions. Findings are consistent with benign prostatic hyperplasia associated with intact status.

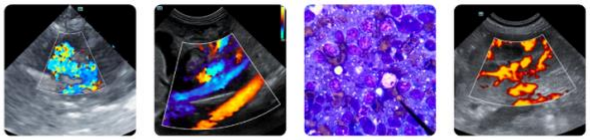
Adrenal Glands

Both adrenal glands show normal shape and echogenicity. Dorsoventral diameters measured in the sagittal plane: The left adrenal gland measures 0.43 cm at the cranial pole and 0.45 cm at the caudal pole. The right adrenal gland measures 0.56 cm at the cranial pole and 0.48 cm at the caudal pole.

Spleen

Splenic thickness is 1.52 cm. The parenchyma demonstrates normal echogenicity and fine homogeneous echotexture without focal parenchymal abnormalities. The splenic capsule is smooth and regular.

Liver



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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 is adequately distended. The wall appears mildly irregular, with features suggestive of mucosal glandular hyperplasia. There is a small amount of organized echogenic biliary content, raising concern for early mucocele formation (mild stage). No dilation of the cystic duct or common bile duct is identified.

Gastrointestinal

The stomach stomach is empty and folded, with mural thickness of 2.22 mm and preserved wall layering, within normal limits for a canine patient.

The pylorus measures 4.51 mm. The duodenum measures 3.04 mm.

The jejunum measures 2.44 mm, with normal wall layering.

No ultrasonographic evidence of ileus, obstruction, or intraluminal foreign material is identified.

Colon:0.89 mm; some formed fecal material is present in the descending colon.

Pancreas

The evaluated pancreatic areas do not show evidence of overt inflammation or neoplastic disease.

Free Abdomen

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

PRIMARY FINDINGS

- Two small urinary bladder uroliths (3–4 mm)
- Mild prostatomegaly with homogeneous parenchyma (consistent with BPH)
- Gallbladder changes suggestive of early mucocele formation / mucosal hyperplasia

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The liver parenchyma appears ultrasonographically unremarkable, with normal size, contour, and echotexture. However, this finding should be interpreted cautiously in light of the marked cholestatic enzyme elevation and mild ALT increase, as significant hepatobiliary disease—particularly functional or early cholestatic disorders—may be present despite a normal sonographic appearance.
In this context, the gallbladder abnormalities, characterized by mild mural irregularity and organized echogenic biliary content, are clinically relevant and most consistent with mucosal hyperplasia or early mucocele formation. These changes may represent the primary source of cholestasis and are compatible with the biochemical profile observed.
The absence of biliary duct dilation or overt hepatic structural changes suggests that the process is early or non-obstructive, and that cholestasis may be occurring at the level of the gallbladder or biliary epithelium rather than due to mechanical obstruction. Other potential contributors to this biochemical pattern in dogs include vacuolar hepatopathy (steroid-induced or endocrine-related), which may occur without marked ultrasonographic abnormalities.

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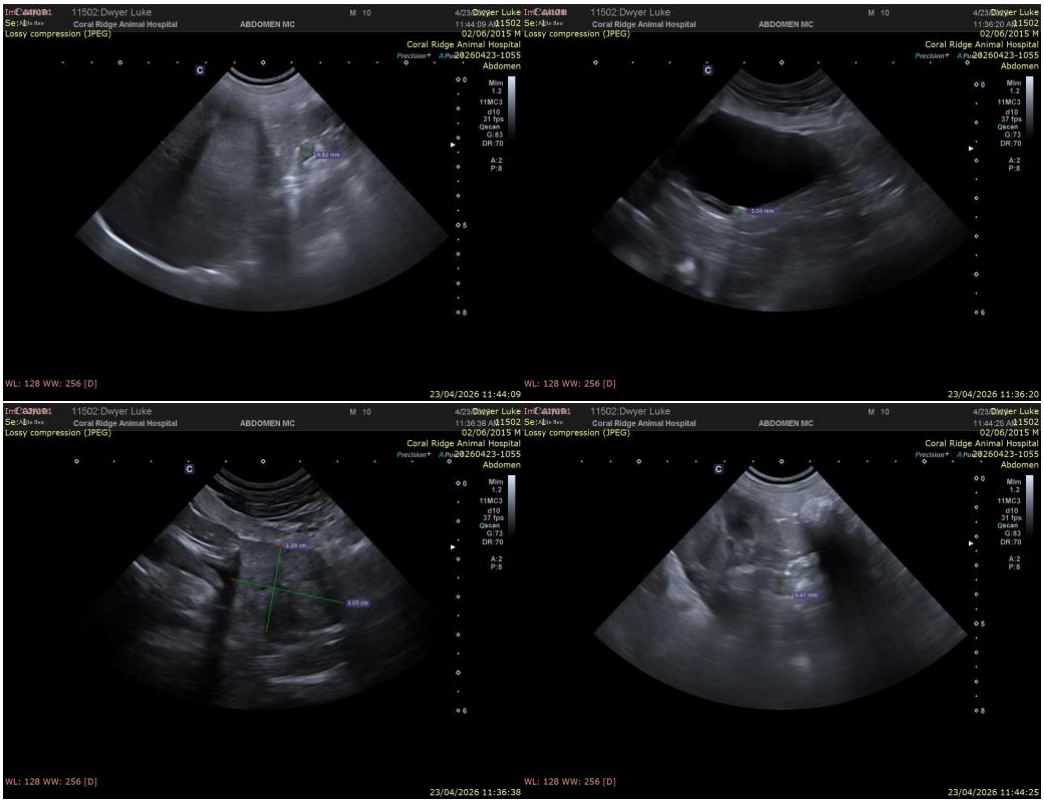
Both adrenal glands are within normal size limits and display normal morphology. As such, no ultrasonographic evidence of adrenal enlargement is identified, and adrenal appearance does not support a diagnosis of hyperadrenocorticism, although functional disease cannot be excluded based on imaging alone.

Mild prostatomegaly with homogeneous parenchyma is consistent with benign prostatic hyperplasia in an intact male dog.

Urinary bladder uroliths are present without evidence of secondary cystitis.
Recommendations

- Further evaluation for hyperadrenocorticism may be considered based on clinical and biochemical findings, noting that adrenal glands appear within normal limits on ultrasound.
- Monitoring and medical management of suspected early gallbladder mucocele is advised (consideration of ursodeoxycholic acid if no evidence of obstruction).
- Periodic ultrasound follow-up of the gallbladder to assess progression.
- Management of urolithiasis as clinically indicated.

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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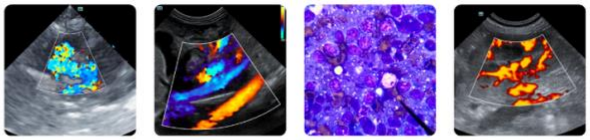

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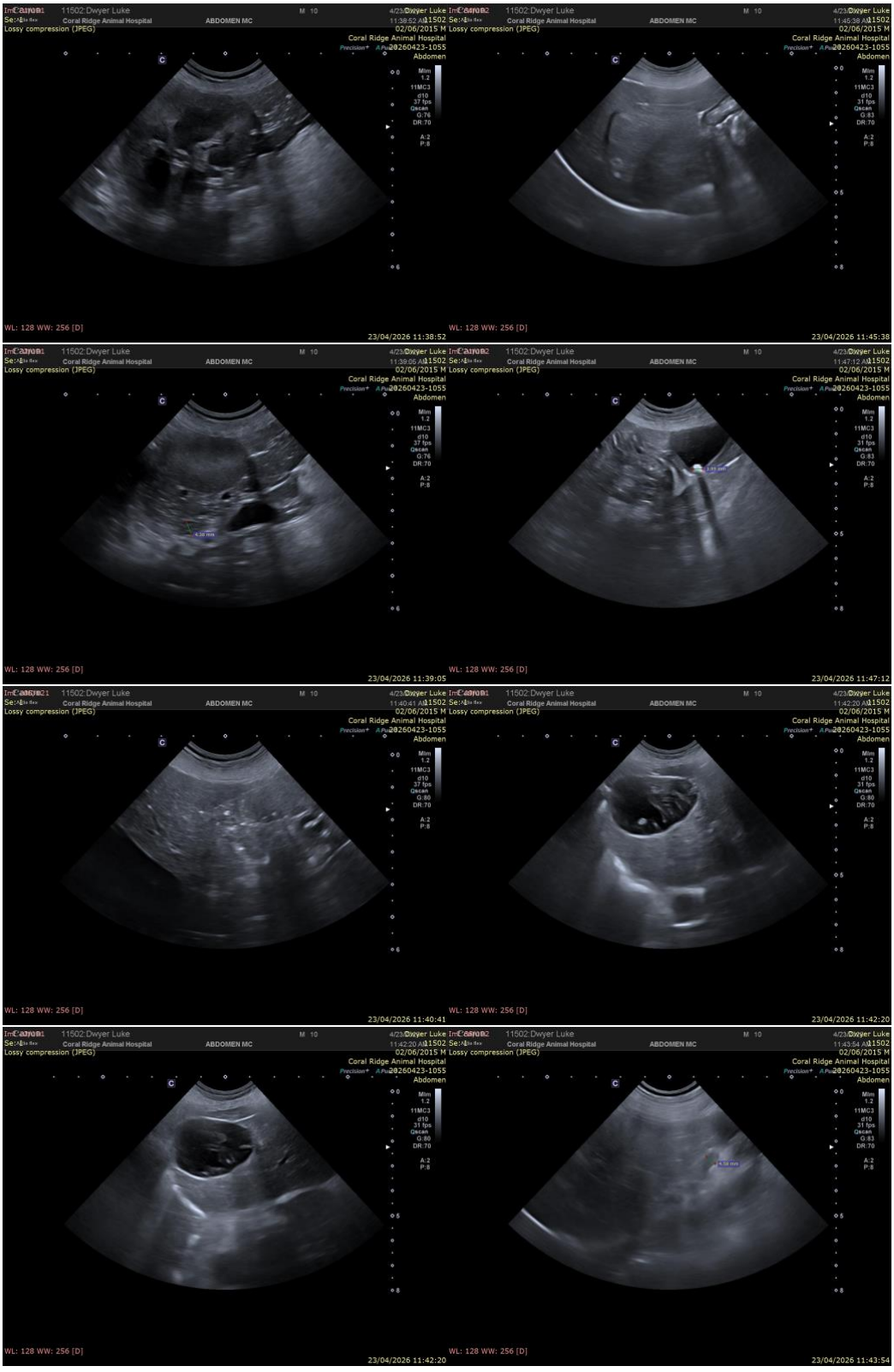

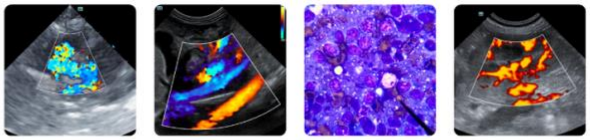

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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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