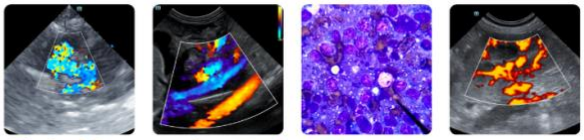

PATIENT

Rex Gunderson

SPECIES

Canine

BREED

Lab Mix

SEX

Neutered Male

AGE

12 Years

WEIGHT

75 lbs

INTERPRETED BY

Eric Lindquist, DMV, DABVP(CFM), Cert. IVUSS

IMAGING PERFORMED BY

Jill Rumachik

HOSPITAL NAME

Clarity Imaging LLC

REFERRING VET

Dr. Eric Howlett

INVOICE

15699

DATE

05/01/26

PRESENTING CLINICAL SIGNS

Presented 4/30/26 for routine wellness visit. PU/PD at home, pot belly appearance. ALP = 648; ALT = 882; remainder of bw unremarkable. USG = 1.007.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The **urinary bladder** was over distended at the time of the sonogram. The trigone, and pelvic urethra to a depth of 1.0 cm presented normal thicknesses and normal tone. The ureters were not visible which is normal. No uroliths or sediment were visualized, and anechoic urine was present. No evidence of inflammatory or neoplastic changes were noted. Ureteral papillae were normal.

The **kidneys** revealed largely normal size and structure, corticomedullary definition and ratio (cortex 1/3 of medulla) were essentially maintained with some mild age-related loss of curvilinear patterns regarding the capsule and C/M junction. The cortices presented largely uniform texture with some increased echogenicity expected for his age patient. Medullary structure differed distinctly from that of the cortex. Slight pyelectasia was noted in the right kidney. The left kidney measured 6.8 cm in length. The right kidney measured 7.1 cm in length. Blood flow to the kidneys appeared to be subnormal in power doppler assessment of the renal cortex.

Adrenal Glands

The **left adrenal gland** was 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 left adrenal gland measured 0.84 cm width.

Further image sets were submitted and revealed a definitive **right adrenal** mass with areas of mineralization measuring 5.6 cm. This appears potentially resectable and mildly deviates the right kidney. No obvious caval invasion was noted. The mass appears to derive from the cranial pole of the right adrenal gland. Mild pericapsular inflammatory pattern was noted around the mass. This is strongly consistent with right adrenal carcinoma.

Spleen

The **spleen** revealed multifocal hyperechoic lipid plaques with generalized enlargement. The spleen was folded upon itself cranially. No overt masses were noted.

Liver

The **liver** was uniformly swollen. The liver presented coarse architecture with mildly increased portal markings and subtle, mixed echogenic changes. This is consistent with vacuolar hepatopathy and some level of remodeling and history of inflammatory component. There was no overt suspicion of neoplasia. The gallbladder was over distended with striating bile consistent with overt gallbladder mucocele. Gallbladder sand was present. The gallbladder measured 10.0 cm x 6.8 cm. Polypoid changes were also noted.

Gastrointestinal

Examination of the **gastrointestinal tract** revealed a stomach and intestine free of stasis, of normal wall thickness, acceptable curvilinear mural detail, and peristaltic activity. Small and large intestine

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demonstrated normal luminal chyme and stool consistency respectively. No obstructive or overt infiltrative disease was noted. No associated abnormal lymphatic activity was noted.

Pancreas

The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Pancreatic duct and capsular contour were acceptably normal and parenchyma respected normal curvilinear patterns. No overt evidence of active inflammatory or neoplastic disease was noted.

ULTRASONOGRAPHIC FINDINGS

- Nonspecific splenomegaly with lipogranulomas.
- Gallbladder mucocele.
- Right adrenal mass.
- Subjectively benign hepatopathy.
- Age-related abdominal changes otherwise.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Gallbladder motility study could be considered or direct cholecystectomy given the mucocele formation.

CT evaluation for surgical planning would be appropriate. Right adrenalectomy is indicated.

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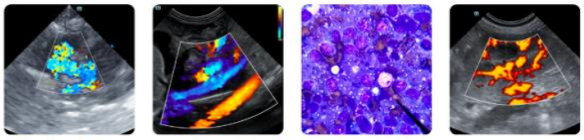

Clinical Sonography & Telecytology
Educational Teleconsultation Services™

SonoPath.com info@sonopath.com 1.800.838.4268

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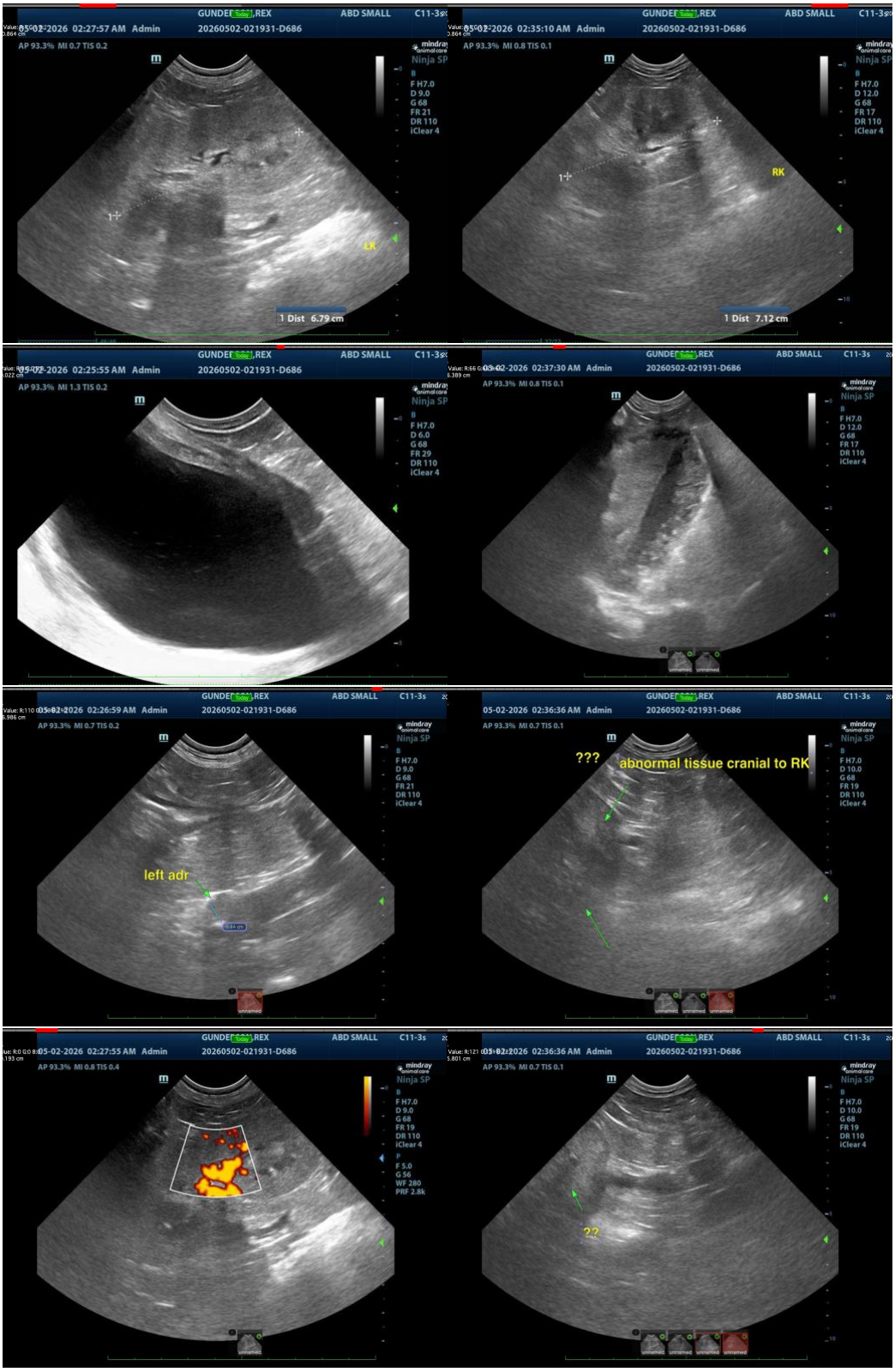

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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Eric Lindquist, DMV, DABVP(CFM), Cert. IVUSS,

CEO, Owner, Founder -- SonoPath.com

info@SonoPath.com

Preparation

- Fast the dog for 12 hours before the test to ensure gallbladder is full.
- Obtain baseline ultrasonographic long axis measurements of gallbladder size in SDEP 11 & SDEP 12 positions. Long axis apex to neck, short axis at widest point.

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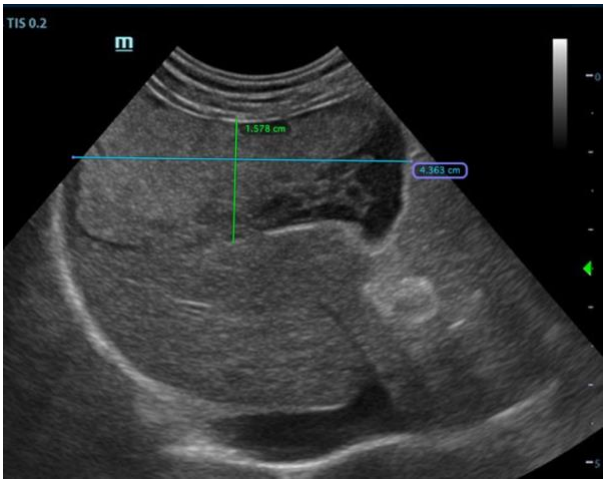

Meal Administration

- Feed a high-fat test meal A/D diet (Hills) (*High Fat/ High Protein*)

Post-Prandial Imaging

- Perform repeat ultrasound prior to feeding (Time 0) and then at 15 & 30 minutes post-meal.
- Re-measure gallbladder volume and assess for contraction.

No change or enlargement: Possible stasis, dyskinesia, mucocele risk, or obstruction.

SonoPath is currently conducting a study for publication on this subject and contributions of image sets following this protocol are appreciated. Info@sonopath.com for more information.