



## PATIENT

Shiloh Popowich

## SPECIES

Canine

## BREED

Golden Retriever

## SEX

Neutered Male

## AGE

12 Years, 6 Months, 4 Weeks

## WEIGHT

32.5 kg

## INTERPRETED BY

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

## IMAGING PERFORMED BY

Dr. Jill Rankin

## HOSPITAL NAME

Willow Park AC

## REFERRING VET

Dr. Lori

## INVOICE

36388

## DATE

3/26/26

## PRESENTING CLINICAL SIGNS

- Abdominal ultrasound to evaluate liver/gall bladder
- The patient has a history of a surgically removed abdominal mass near the cecum that came back as a sarcoma.

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### *Urinary System*

The **bladder** in this patient was mildly thickened with slight echogenic mural changes. No calculi or masses were noted. Slight micropolypoid changes were noted. This is a frequent finding in older animals and may be linked to a history of chronic urinary tract infection or active urinary tract infection. Urinalysis would be recommended with culture if any evidence of inflammatory sediment is present. The region of the trigone and visible pelvic urethra were normal. This is a mild change. The pelvic urethra was imaged 2.0 cm beyond the cystourethral junction.

The **kidneys** revealed normal size and structure, corticomedullary definition and ratio for this age. The cortices presented largely uniform texture with normal echogenic relationship to liver and spleen. Medullary structure differed distinctly from the cortex, and no evidence of pelvic dilation was present. The capsules were acceptably uniform without significant irregularities. The kidneys measured 7.0 cm each.

### *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 0.75 cm at the caudal pole and 0.72 cm at the cranial pole.

The **right adrenal gland** was swollen and hypoechoic, measuring 1.1 cm at the cranial pole and 0.76 cm at the caudal pole.

### *Spleen*

The **spleen** presented a smooth homogeneous parenchyma hyperechoic to liver and renal cortical parenchyma. The capsule was smooth without noticeable expansion or deviation from within the spleen or adjacent pathology. The splenic vasculature demonstrated normal volume without signs of congestion or thrombosis. No sonographic evidence of acute or chronic inflammatory, neoplastic, or infarctual changes were noted.

### *Liver*

The left **liver** revealed an expansive mixed hypoechoic disruptive mass measuring 3.4 cm. Nodular changes were noted throughout the liver. The cranial liver also revealed a hypoechoic 2.2 cm mass with regional hyperechoic surrounding fat. Slight areas of free fluid were noted between the liver lobes. The gallbladder and common bile duct were unremarkable.

### *Gastrointestinal*

Examination of the **gastrointestinal tract** revealed an unremarkable stomach and small intestine regarding structure. There were minor areas of luminal fluid noted. There was no evidence of



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obstructive pattern. Curvilinear patterns were retained throughout the gastrointestinal tract. Areas of hyperperistalsis were noted. This is consistent with response to irritation. The colon was unremarkable.

### *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.

### *Free Abdomen*

A hypoechoic **lymph node** was noted cranial to the spleen.

A separate undifferentiated mass was noted cranial to the spleen, measuring 2.7 cm.

A separate undifferentiated mass was noted in the cranial abdomen measuring approximately 6.0 cm.

## ULTRASONOGRAPHIC FINDINGS

- Lymph node and hepatic metastatic pattern
- Cranial abdominal masses
- Swollen right adrenal gland
- Gastroenteritis pattern
- Age-related urinary bladder changes

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

This is multicentric metastatic neoplastic pattern (sarcomatous type spread is suspected) with secondary gastrointestinal upset. FNA of the hepatic and left cranial abdominal lesions is recommended with immediate chemotherapeutic intervention.





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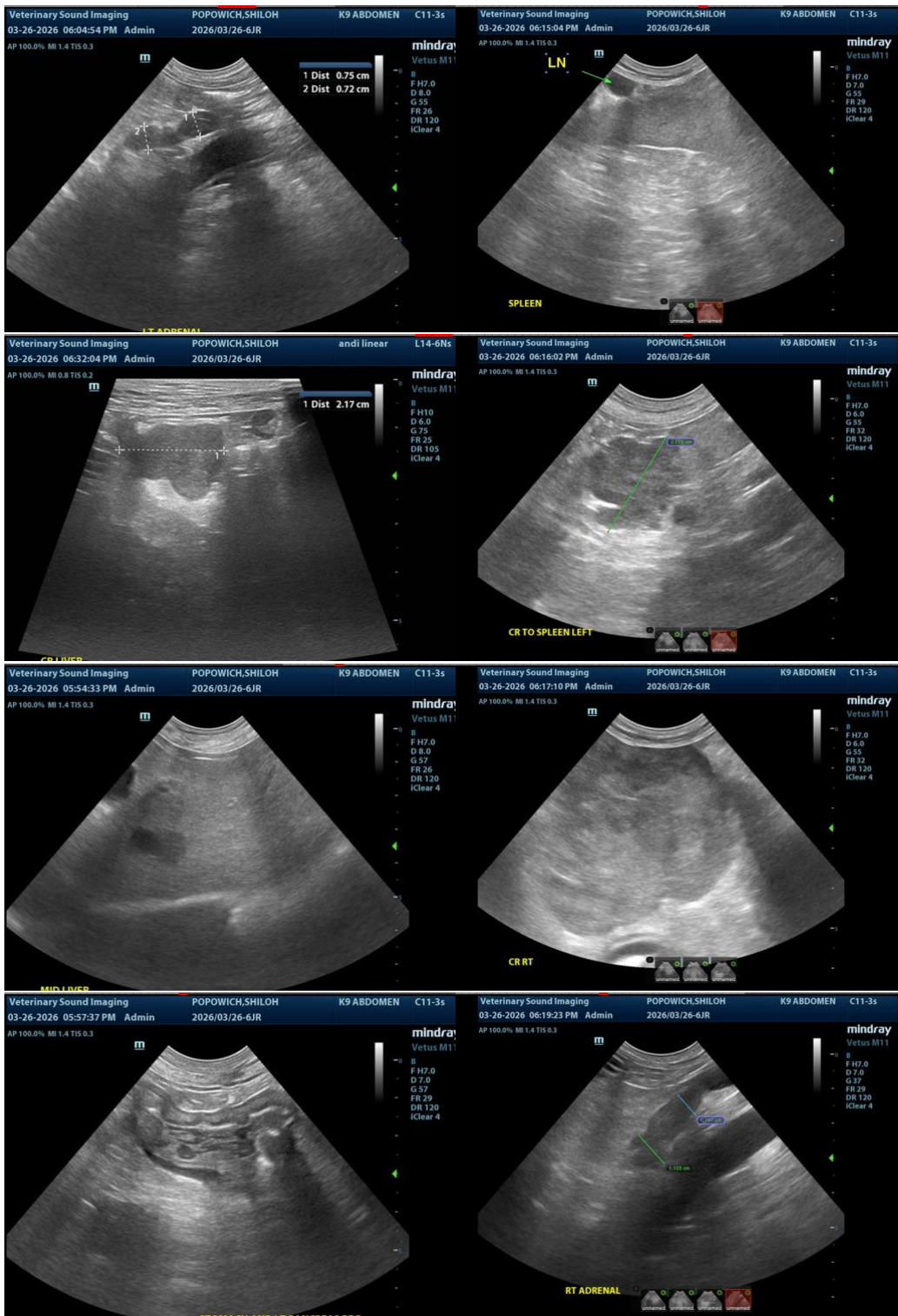
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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,  
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[info@SonoPath.com](mailto:info@SonoPath.com)