

## PATIENT

Harper Vukanovich

## SPECIES

Canine

## BREED

Golden Retriever

## SEX

Spayed female

## AGE

11 years

## WEIGHT

70.5 lbs

## INTERPRETED BY

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

## IMAGING PERFORMED BY

Kelly Reshny, RVT

## HOSPITAL NAME

South Side Pet Hospital

## REFERRING VET

Dr. Honda

## INVOICE

44053

## DATE

4/27/23

## PRESENTING CLINICAL SIGNS

History: Mainly foam am - ate breakfast and vomited around 9 - then vomited right after (food) Ate rice twice - once at 4 pm then again at 5 pm - able to keep food down - Has been drinking water No diet changes No history of toxin exposure - no FB ingestion muscle mass loss both thighs - moderate paresis both hindlimbs mildly distended abdomen - no signs of fluid wave . No obvious signs of masses - splenomegaly? Current Medications Omeprazole 20mg 1 tab BID, Metronidazole 250mg 1 tab SID, Flexadin Advanced daily, CBD oil Pregabalin 50mg 1 BID, Abnormal PE/Chem/CBC/UA Results: Biochem: ALT 851, AST 524, ALP 625, TBili 56.4 Conj Bili 39.6, Lipase 337

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### Urinary System

The **urinary bladder**, trigone, and pelvic urethra 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 was 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 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 and no evidence of pelvic dilation was present. The left kidney measured 6.0 cm. The right kidney measured 5.42 cm.

### Adrenal Glands

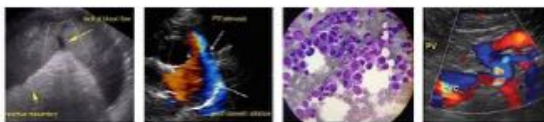
Both **adrenal glands** were visualized and recognized as having largely normal shape, size, position and acceptable echogenicity for this age group and breed. Some heterogeneity was noted within the adrenal parenchyma without concerning capsular distortion. These changes are likely age related but should be monitored by sonogram should the patient be suspected of having adrenal disease. The right adrenal gland measured 2.64 x 2.26 cm at the cranial pole and 1.03 cm at the caudal pole. The left adrenal gland measured was at the upper limits of normal and measured 2.33 x 0.81 cm at the caudal pole and 0.88 cm at the cranial pole.

### Spleen

The **spleen** in this patient revealed a cystic, mixed, hypoechoic, complex mass without overt rupture at the time of the sonogram. The mass derived from the caudal pole of the spleen. The majority of the splenic mass was cystic with echogenic, fluid filled cavities.

### Liver

The **liver** revealed mild, heterogenous, hypoechoic nodular changes. The gallbladder and common bile duct were unremarkable.



**PATIENT**

**Gastrointestinal**

Harper Vukanovich

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

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**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.

**SEX**

Spayed female

**Heart**

Rapid view of the heart revealed no evidence of pathology in the pericardium or right auricle.

**AGE**

11 years

**ULTRASONOGRAPHIC FINDINGS**

**WEIGHT**

70.5 lbs

Splenic mass with undefined, hepatic nodular changes. Potential for metastatic disease or nodular hyperplasia.

Age related renal changes.

Age related adrenal changes.

**INTERPRETED BY**

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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**IMAGING PERFORMED BY**

Kelly Reshny, RVT

I recommend chest radiographs and if free of evident metastatic disease then exploratory surgery is indicated with expectations towards splenectomy, liver inspection and biopsy. Hemangiosarcoma is possible. Benign cystic hematoma, hyperplasia or stromal tumor is less likely. Hepatic nodular hyperplasia versus metastatic disease. Given the bilirubin elevation and liver elevation screening FNA of the liver can be considered. Comorbidity of acute hepatic insult along with the splenic may be the issue in this patient as the parenchymal changes in the liver are fairly mild. Leptospirosis titers are warranted. Assessment of acute hepatic toxins are warranted.

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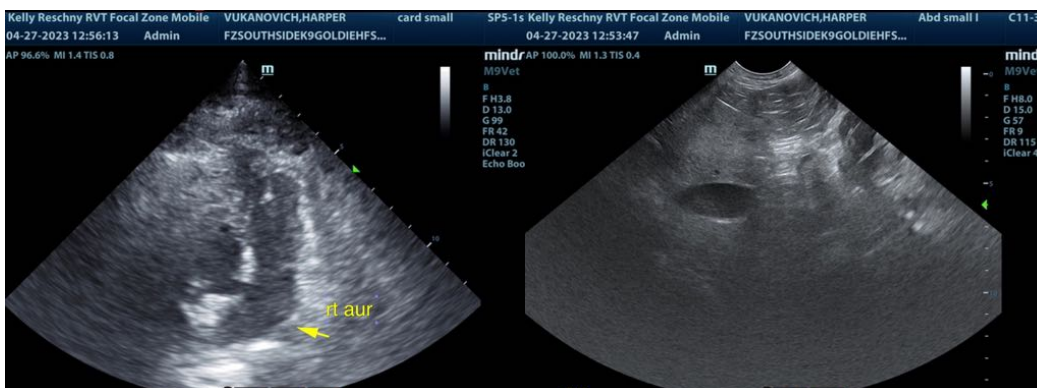
Dr. Honda

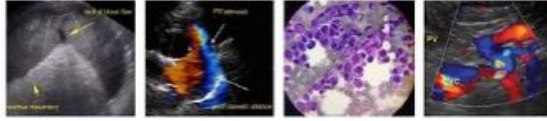
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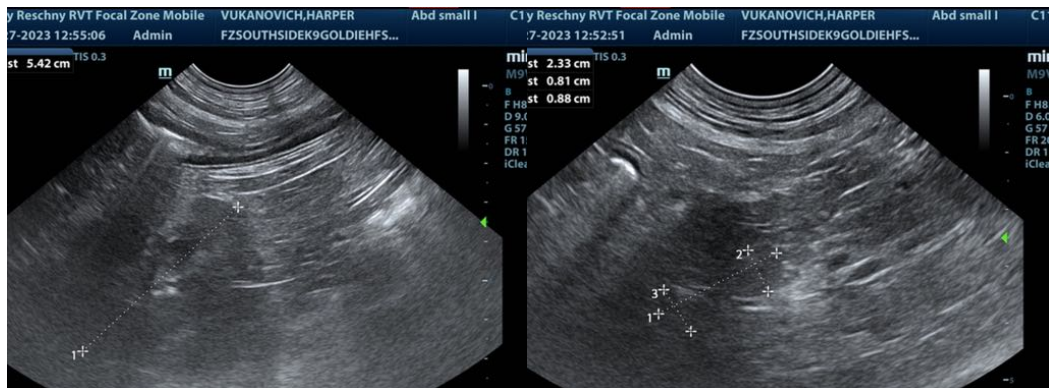
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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, Cert. IVUSS, CEO of SonoPath.com  
Eric.Lindquist@SonoPath.com