



**PATIENT PRESENTING CLINICAL SIGNS**

**Hank Greenan**  
History: Change of behavior at home such as barking at random things at home and chewing up toys.  
Early signs of Cognitive dysfunction  
Abnormal PE/Chem/CBC/UA Results: ALP 369 ( 5-160 U/L) RETIC HGB 23.3 LOW 24.5-31.8 pg  
LYMPHOCYTE 826 LOW 1060-4950 /uL

**SPECIES**

Canine

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**BREED Urinary System**

Mix

The **urinary bladder**, trigone, and pelvic urethra presented normal thicknesses and normal tone. The pelvic urethra was imaged 1.0 cm beyond the cystourethral junction. 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.

**SEX**

Neutered male

**AGE**

9 years

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 this age patient. Medullary structure differed distinctly from that of the cortex and no evidence of pelvic dilation was present. The left kidney measured 6.9 cm.

**WEIGHT**

88 lbs

**Adrenal Glands**

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

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 0.6 cm. The right adrenal gland was not visualized.

**IMAGING PERFORMED BY**

Dr. Gramazio

**Spleen**

**HOSPITAL NAME**

Shohola VH

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 was noted.

**REFERRING VET**

Dr. Gramazio

**Liver**

**INVOICE**

31273

The **liver** revealed fairly uniform enlargement. Heterogenous nodular changes were noted. This created a hepatoma type mass that measured 5.0 cm. The remainder of the liver did not have optimal resolution. Approximately only 30% of the liver was visualized. The gallbladder visualized and the liver around the gallbladder appeared unremarkable.

**DATE**

6/27/22



**PATIENT**

**Gastrointestinal**

Hank Greenan

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.

**SPECIES**

Canine

**BREED**

Mix

**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**

Neutered male

**ULTRASONOGRAPHIC FINDINGS**

Left sided liver mass, further extension of the pathology cannot be evaluated.

**AGE**

9 years

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**WEIGHT**

88 lbs

Further imaging of the liver is recommended to assess the extent of the hepatic pathology. The lesion visualized appears to be subjectively low-grade or benign such as hepatoma or pronounced nodular hyperplasia. However, FNA is indicated for further definition. Given the behavioral change full CNS examination is warranted. If any abnormalities are present then brain CT is indicated. Bile acid profile would be appropriate.

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUS

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**HOSPITAL NAME**

Shohola VH

**REFERRING VET**

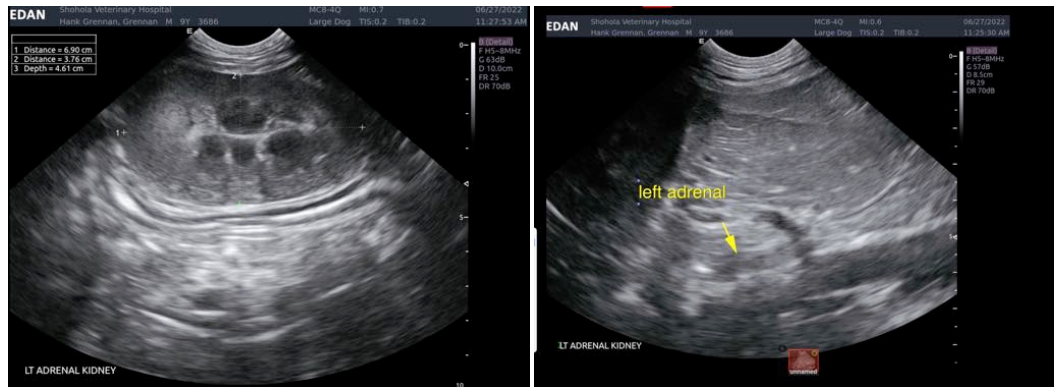
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**PATIENT**

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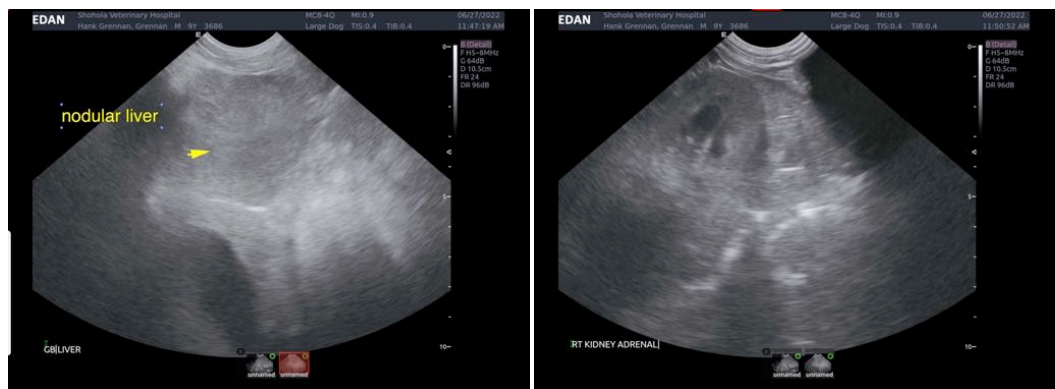
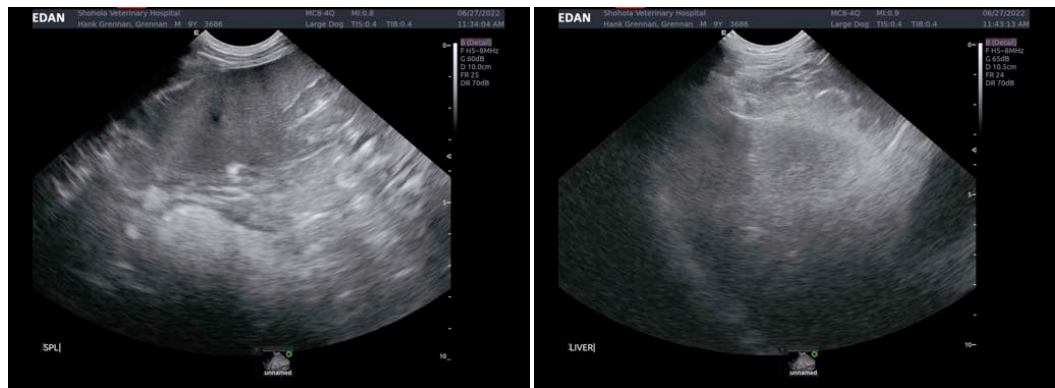
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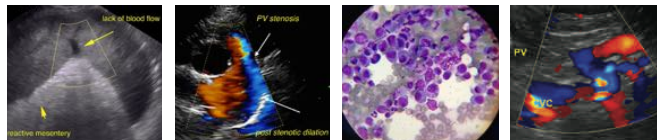
6/27/22



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



**PATIENT**

info@SonoPath.com

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