



**PATIENT**

Eddie France

**SPECIES**

Canine

**BREED**

West Highland White  
Terrier X

**SEX**

Neutered Male

**AGE**

13 Years

**WEIGHT**

12.5 kg

**INTERPRETED BY**

Eric Lindquist, DMV

DABVP, Cert. IVUSS

**IMAGING  
PERFORMED BY**

JSS

**HOSPITAL NAME**

King Hopkins PH

**REFERRING VET**

Dr. Layota Brown

**INVOICE**

44598

**DATE**

1/29/23

**PRESENTING CLINICAL SIGNS**

12/17/2022 appt notes - O says P is v lethargic. Did not e/d yesterday but ate/drank a little bit this morning. Staggeres a bit when walking, No v/d. - oral liver support medication dispensed SID (Rx: Denamarin 225mg - 1 cap/day for 30 days from 12/17) - Strongly recommended to bring Eddie back if there is no improvement within 1-3 days. Consider further workup or advanced imaging (abdominal ultrasound) if there is no improvement in liver values after 30 days.

Abnormal PE/Chem/CBC/UA Results: Catalyst Dx (December 17, 2022 6:35 PM) Test Results Reference Interval ALT 605 U/L 10 - 125 HIGH ALKP 242 U/L 23 - 212 HIGH Catalyst Dx (January 16, 2023 4:15 PM) Test Results Reference Interval ALT 409 U/L 10 - 125 HIGH AST 54 U/L 0 - 50 HIGH

**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 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 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. Slight mineralizations noted. The right kidney measured 6.4 cm. The left kidney measured 5.13 cm.

**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 0.51 cm at the cranial pole and 0.48 cm at the caudal pole.

The **right adrenal gland** was not visualized.

**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 **liver** revealed an expansive isoechoic 4.5 cm mass, which appeared to be deriving from the caudate process and impinging upon the cranial pole of the right kidney. Coarse architecture elsewhere. The gallbladder and common bile duct were unremarkable. Increased portal markings present.

**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.

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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.

**BREED**

West Highland White Terrier X

**ULTRASONOGRAPHIC FINDINGS**

- Chronic inflammatory hepatopathy with focal liver mass
- Age related renal changes

**SEX**

Neutered Male

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**AGE**

13 Years

The liver mass appears resectable. However, CT evaluation indicated. The margins are ill-defined. The tissue is isoechoic to surrounding fat. Differentials include pronounced nodular hyperplasia versus carcinoma. FNA or core biopsy of the mass and the general liver warranted. Bile acid profile warranted. Leptospirosis titers warranted. Given the patient history, full CNS examination warranted. If any CNS signs are present, then skull CT with contrast would be indicated. The liver presentation may be unrelated to the clinical signs.

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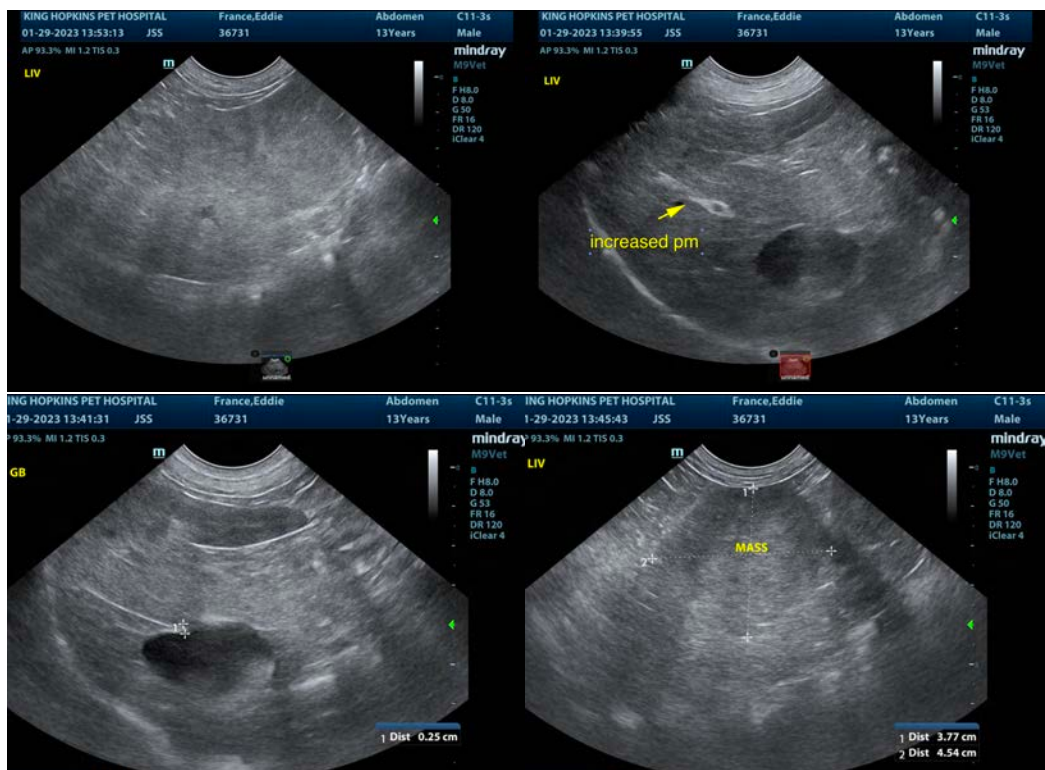
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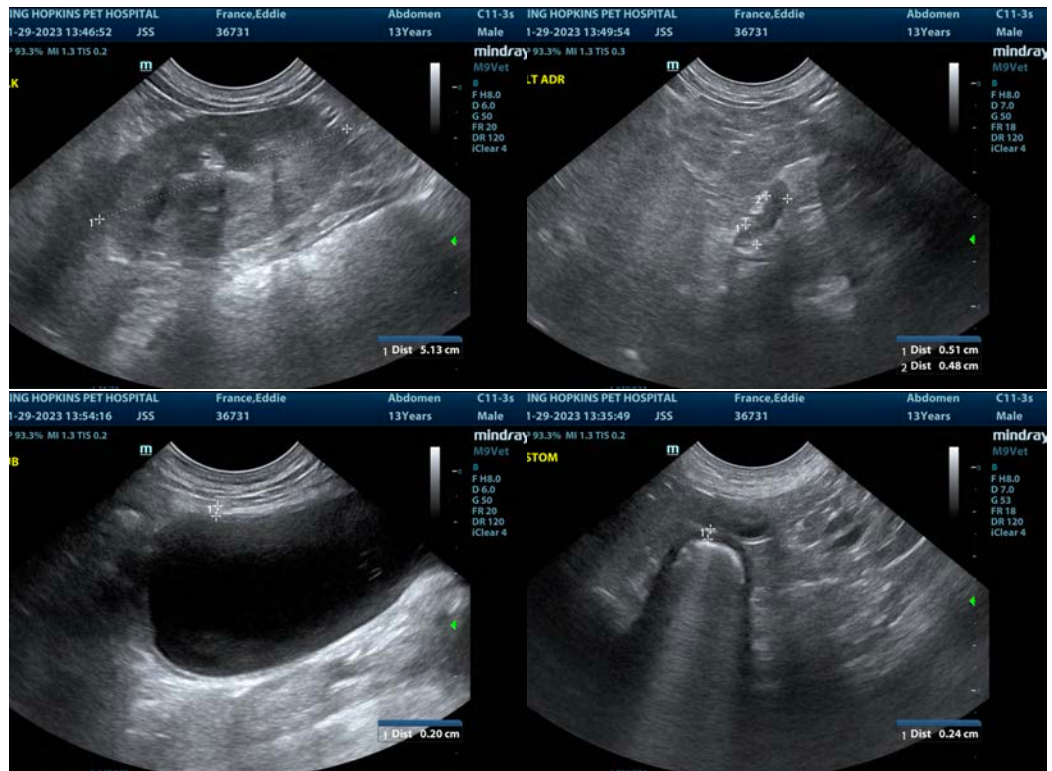
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Eric Lindquist, DMV, DABVP, Cert. IVUSS, CEO of SonoPath.com

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