



**PATIENT PRESENTING CLINICAL SIGNS**

Major Kajor History: Alk Phos 1016, R/o hepatopathy. Current meds: phenobarbital (level 13 mg/ml)  
Abnormal PE/Chem/CBC/UA Results: Alk Phos 1016

**SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

Canine

**Urinary System**

**BREED**

Lab mix

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth. The bladder lumen is distended with anechoic urine. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

**SEX**

Male, neutered

The prostate is normal in size (1.15 cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

**AGE**

7 Yrs.

The left kidney is normal size (7.22 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**WEIGHT**

62.6 lbs.

The right kidney is normal in size (7.59 cm in length) with a normal shape, smooth peripheral margins and normal internal architecture. There is mild loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. A few small nephroliths are visualized. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

**Adrenal Glands**

**INTERPRETED BY**

Andrea Nicastro, DVM,  
Diplomate ACVIM  
(Small Animal Internal  
Medicine)

The left adrenal gland is normal size (0.81 cm at cranial pole) (0.58 cm at caudal pole) (3.19 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

The right adrenal gland is not definitively visualized.

**Spleen**

**IMAGING PERFORMED BY**

Jessica Miller

The spleen is normal in size (1.56 cm in width at the level of the hilus) with a normal capsular contour. The parenchyma is subtly mottled in appearance. No focal lesions are observed. Splenic vasculature is normal.

**Liver**

**HOSPITAL NAME**

Whippany VH

The liver is subjectively prominent in size with normal curvilinear peripheral contours. The parenchyma is isoechoic relative to the spleen. Several small ill-defined hypoechoic nodules are observed throughout the organ. Vascular and biliary tracts are of normal volume with no evidence of congestion. The gallbladder is of normal contours and contains some dependent echogenic debris. The wall is normal in thickness. No choleliths are observed. The cystic and common bile ducts are normal.

**REFERRING VET**

Dr. Smith

**Gastrointestinal**

**INVOICE**

12078

The gastric lumen is moderately distended with ingesta and soft shadowing material. The gastric wall is normal in thickness with a normal layering pattern. The proximal duodenal lumen is mildly distended with chyme. The remaining small intestinal segments are not dilated. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. No obstructive disease is noted.

**DATE**

9/14/21



**PATIENT**

**Pancreas**

Major Kajor

The region of the pancreas is isoechoic relative to surrounding omental fat. No obvious parenchymal abnormalities are observed. There is no evidence of regional inflammation or effusion.

**SPECIES**

**Free Abdomen**

Canine

The peritoneal cavity is normal. There is no evidence of inflammation or effusion. The abdominal lymph nodes are normal/not visible.

**BREED**

Lab mix

**ULTRASONOGRAPHIC FINDINGS**

**SEX**

**Primary Findings:**

Male, neutered

- Non-specific diffuse hepatopathy. Differentials include benign pathology (i.e., regenerative nodular hyperplasia, vacuolar hepatopathy, age-related remodeling), phenobarbital-induced ALP elevation, other. Infiltrative neoplasia is possible but considered unlikely.

**AGE**

**Secondary Findings:**

7 Yrs.

- The splenic parenchyma changes are most consistent with a benign process such as lymphoid hyperplasia, extramedullary hematopoiesis or splenitis with a low possibility of infiltrative neoplasia (i.e., lymphoma, mast cell neoplasia).
- Minor bilateral age-related renal changes with right dystrophic mineralization and non-obstructive nephroliths.
- The gastric luminal contents could be consistent with ingesta and/or foreign material. Correlation with clinical findings is recommended.

**WEIGHT**

62.6 lbs.

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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

- Consider pre- and post-prandial serum bile acids to further assess for hepatic dysfunction.
- Serial monitoring (every 3-4 months) of the patient's liver values is recommended. If values continue to increase, consider transitioning to a different anticonvulsant (under the advisement of a board-certified veterinary neurologist), repeat abdominal ultrasound +/- hepatic tissue sampling.

**IMAGING PERFORMED BY**

Jessica Miller

**HOSPITAL NAME**

Whippany VH

**REFERRING VET**

Dr. Smith

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**PATIENT**

Major Kajor

**SPECIES**

Canine

**BREED**

Lab mix

**SEX**

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**AGE**

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**HOSPITAL NAME**

Whippany VH

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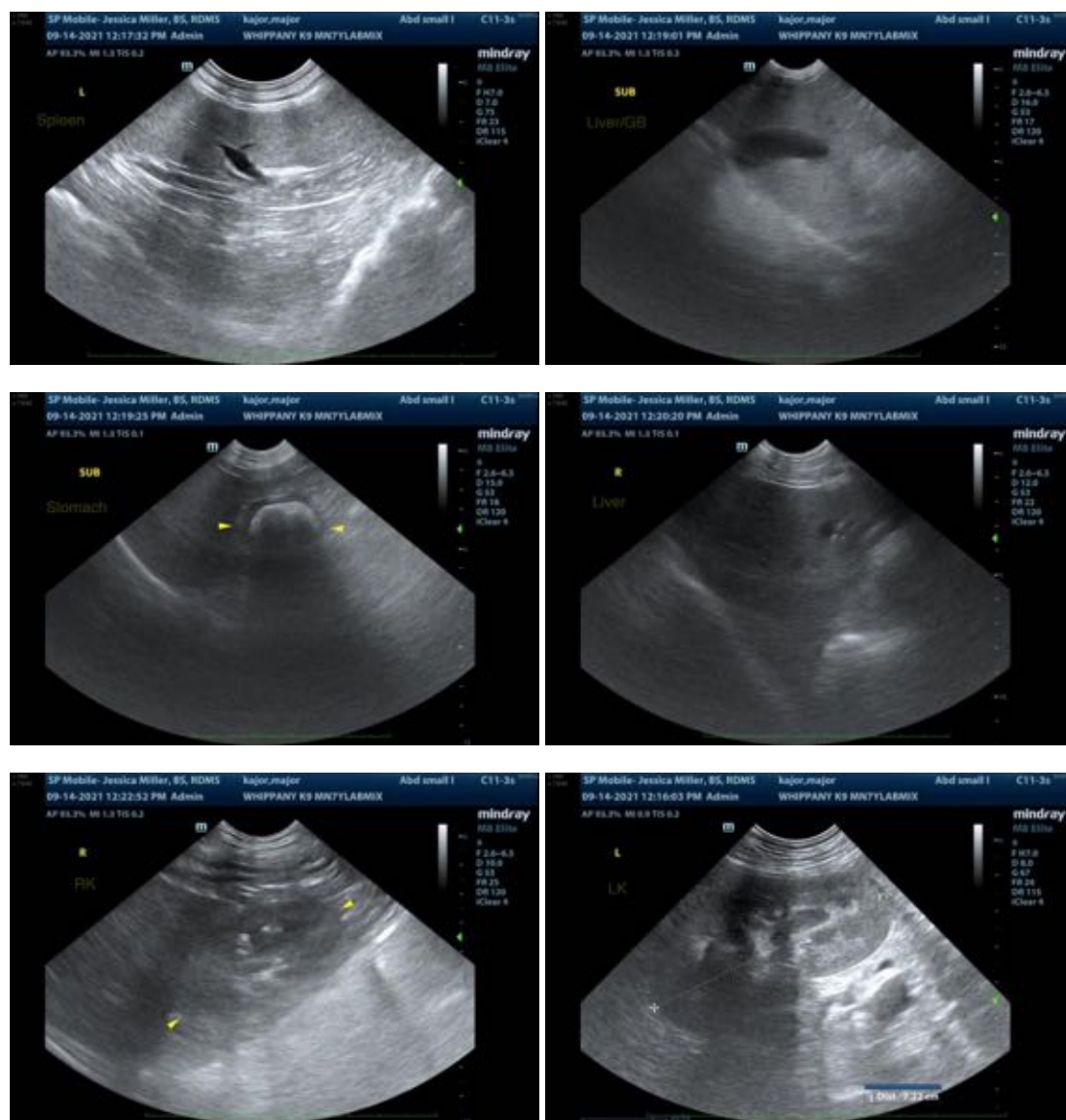
Dr. Smith

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The information and recommendations provided are based on the images presented by the referring veterinarian. 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.

Andrea Nicastro, DVM, Diplomate ACVIM (Small Animal Internal Medicine)

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