**PATIENT**

DaVinci Olinger

**SPECIES**

Canine

**BREED**

Chihuahua Mix

**SEX**

MN

**AGE**

11 yrs

**WEIGHT**

22 lbs.

**INTERPRETED BY**R. McKenzie Daniel,  
DVM, DABVP (Canine  
and Feline)**IMAGING  
PERFORMED BY**

Amy Mayhew LVT

**HOSPITAL NAME**

SVS Imaging MI

**REFERRING VET**

Oxford VH

**INVOICE**

14741

**DATE**

8/26/22

**PRESENTING CLINICAL SIGNS**

Came in for dental, noticed on exam pot belly appearance, firm structure palpated in left cranial abdomen.

Abnormal PE/Chem/CBC/UA Results: 3/18/22 ALP (835), Globulins (4.2), Albumin (4.0)

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****Urinary System**

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 2.0 cm exhibited normal thickness and tone. Anechoic urine was present in the lumen with no uroliths or sediment. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes was noted.

The residual prostate was free of pathology.

The area of the aortic trifurcation was free of pathology.

Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio was maintained. Nonuniform cortex echotexture was noted with moderate loss of corticomedullary border demarcation. Both kidneys exhibited pinpoint cortical hyperechoic foci, which may indicate areas of pinpoint cortical microinfarction, fibrosis, or mineralization. Concurrent multiple small cortical cysts were present in both kidneys. Mild bilateral pyelectasia was present. Bilateral pinpoint medullary mineral was present. The left kidney measured 5.7 cm in length. The right kidney measured 5.7 cm in length.

**Adrenal Glands**

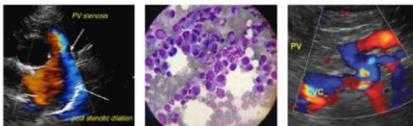
Bilateral symmetrical adrenal gland enlargement with uniformly hypoechoic parenchyma was present. The left adrenal gland measured 0.94 cm width at the caudal pole and 0.82 cm width at the cranial pole. The right adrenal gland measured 0.65 cm width at the caudal pole and 0.87 cm width at the cranial pole.

**Spleen**

A moderately sized to expansive, mass involving the subjective mid to caudal spleen with secondary capsule expansion and disruption was present and measured approximately 8.0-8.5 cm in diameter. The mass was nonhomogeneous to mixed echogenic and hypoechoic without areas of cavitation. Focal cystic component within the mass was noted. The non-affected spleen exhibited primarily finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis.

**Liver/ Gallbladder**

The liver exhibited generalized enlargement with symmetrical to mildly rounded hepatic contour. Mild uniform increased parenchyma echogenicity compared to the spleen and renal cortices was noted. The liver parenchyma was uniform with a mildly coarse echotexture. Multiple, primarily small, thin-walled Intraparenchymal cysts containing anechoic fluid were present. The hepatic and portal vasculature were normal in appearance without signs of congestion. Concurrent intermittent

**PATIENT**

DaVinci Olinger

**SPECIES**

Canine

**BREED**

Chihuahua Mix

**SEX**

MN

**AGE**

11 yrs

**WEIGHT**

22 lbs.

**INTERPRETED BY**R. McKenzie Daniel,  
DVM, DABVP (Canine  
and Feline)**IMAGING  
PERFORMED BY**

Amy Mayhew LVT

**HOSPITAL NAME**

SVS Imaging MI

**REFERRING VET**

Oxford VH

**INVOICE**

14741

**DATE**

8/26/22

hyperechoic Intraparenchymal nodules, likely consistent with lipogranulomas or nodular hyperplasia, were present.

The gallbladder was non-distended in size with moderate, nondependent yet nonorganized, mobile gallbladder debris. The gallbladder and common bile duct were otherwise normal.

***Gastrointestinal***

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach was empty with no signs of ileus, obstruction, or foreign material.

The small intestine presented intact wall layering with 1:3 muscularis/mucosa ratio. The lumen of the small intestine was empty with no signs of ileus, obstruction, or foreign material.

Normal visible colon wall layers were present with apparent formed feces in lumen.

***Pancreas***

The pancreas was normal in size and contour with isoechoic to heterogeneous parenchyma compared to adjacent omentum. No signs of active inflammation or neoplasia. This is likely consistent with age-related pancreatic changes with no evidence of active pancreatitis.

***Free Abdomen***

Regional perisplenic hyperechoic mesentery was present. Mildly prominent intermittent perisplenic mesenteric lymph nodes were present with an example measuring 0.85 cm in diameter. No evidence of perisplenic or peritoneal free fluid was noted.

**ULTRASONOGRAPHIC FINDINGS**

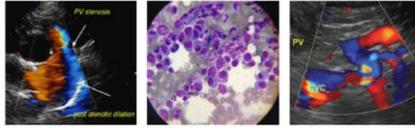
- Moderately sized nonhomogeneous splenic mass
- Vacuolar hepatopathy pattern with intermittent small intraparenchymal cysts and subjective benign nodules
- Moderate gallbladder debris (non-mucocele)
- Bilateral chronic renal changes exhibiting pinpoint medullary mineral and small cortical cysts
- Bilateral prominent adrenal glands - nonspecific

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The splenic mass is nonspecific with considerations including hyperplasia, hematopoiesis, granuloma, splenitis, or neoplasia (sarcoma, round cell neoplasia, other). Neoplastic criteria is favored. No overt evidence of intraabdominal metastasis, although potential for non-visualized metastasis / micrometastasis cannot be definitively excluded.

The overall hepatic presentation is suggestive of benign hepatopathy / hepatomegaly.

Adrenal testing could be considered if clinical signs suggestive of Cushing's Syndrome are present. Assuming no evidence of thoracic pathology and normal cardiopulmonary status on three view chest radiographs, laparotomy with splenectomy, gross inspection of the liver, and gallbladder with potential for hepatic biopsies if clinically indicated could be considered.



**PATIENT**

DaVinci Olinger

**SPECIES**

Canine

**BREED**

Chihuahua Mix

**SEX**

MN

**AGE**

11 yrs

**WEIGHT**

22 lbs.

**INTERPRETED BY**

R. McKenzie Daniel,  
DVM, DABVP (Canine  
and Feline)

**IMAGING  
PERFORMED BY**

Amy Mayhew LVT

**HOSPITAL NAME**

SVS Imaging MI

**REFERRING VET**

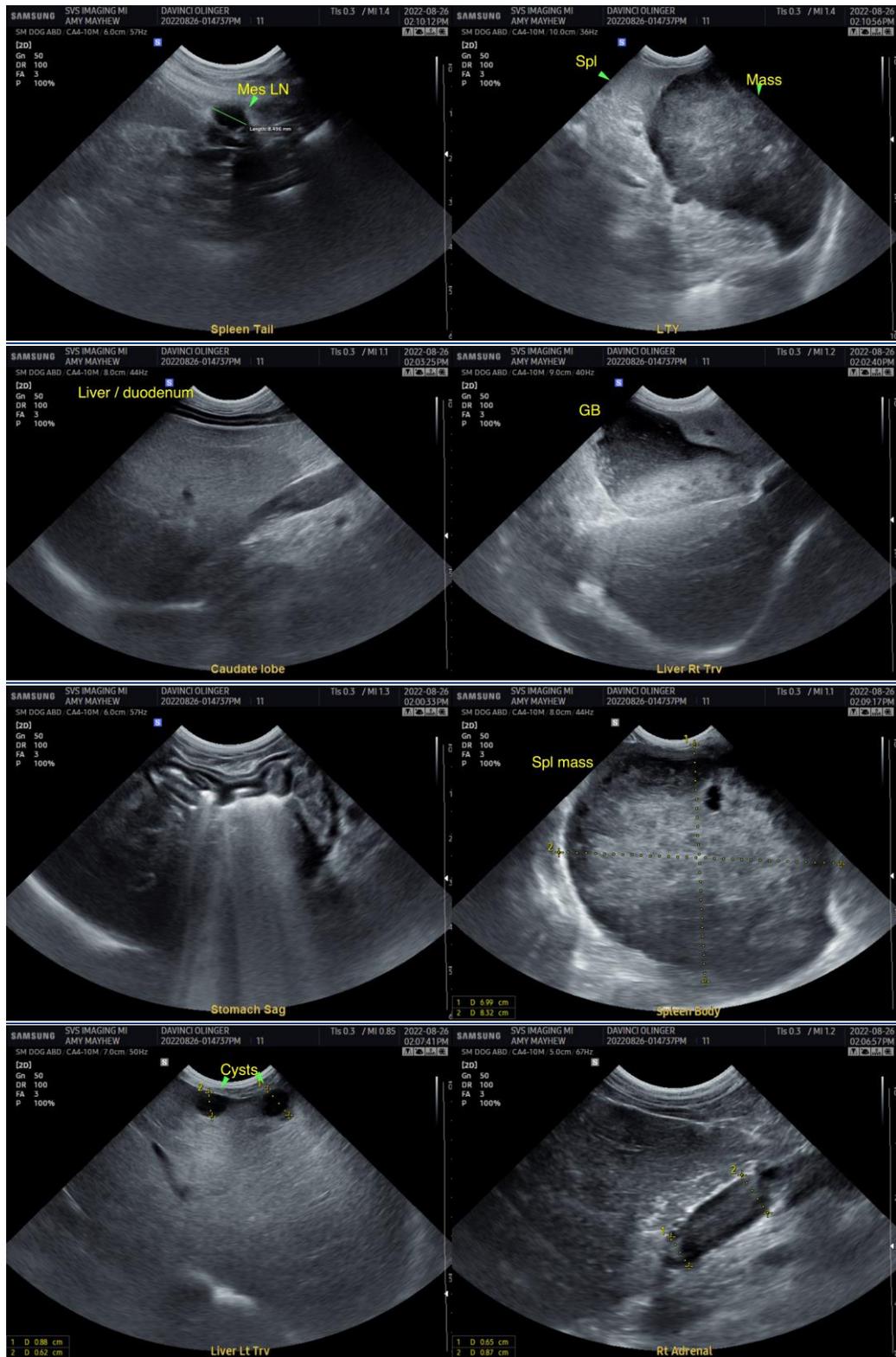
Oxford VH

**INVOICE**

14741

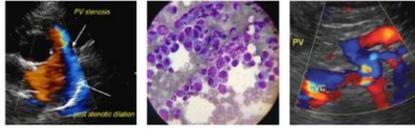
**DATE**

8/26/22



**IMAGING PERFORMED BY**

SVS Mobile Imaging MI 734-637-7711  
svsimagingmi@gmail.com



**PATIENT**

DaVinci Olinger

**SPECIES**

Canine

**BREED**

Chihuahua Mix

**SEX**

MN

**AGE**

11 yrs

**WEIGHT**

22 lbs.

**INTERPRETED BY**

R. McKenzie Daniel,  
DVM, DABVP (Canine  
and Feline)

**IMAGING  
PERFORMED BY**

Amy Mayhew LVT

**HOSPITAL NAME**

SVS Imaging MI

**REFERRING VET**

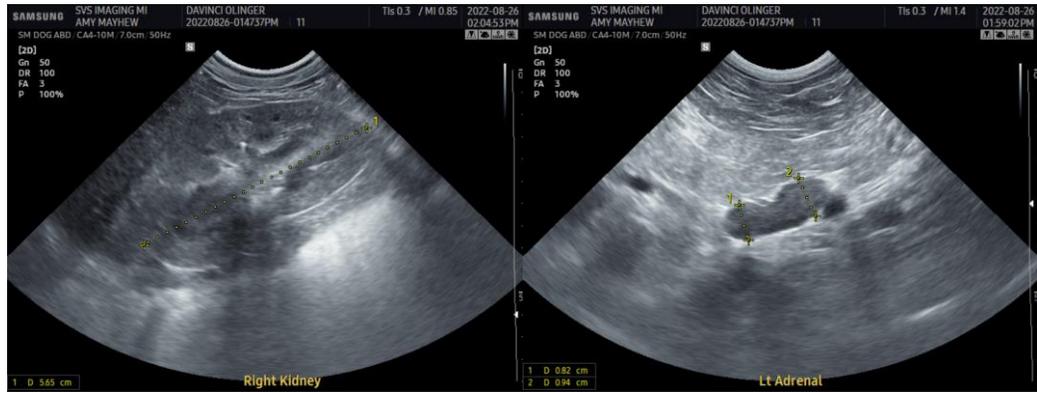
Oxford VH

**INVOICE**

14741

**DATE**

8/26/22



**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.

**R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)**  
**info@SonoPath.com**