



**PATIENT PRESENTING CLINICAL SIGNS**

Sophia Drago History: Decreased activity, elevated liver enzymes Denamarin  
 Labs: amylase 1521, lipase 3603, ALT 168, ALP 597, Tbili 1.3

**SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

Canine **Urinary System**

**BREED** The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 3.0 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 were noted. Aortic trifurcation was normal.

Yorkie Mix

**SEX** Normal size and margination was present in the kidneys. A normal 1:3 cortex / medulla ratio was maintained. The medulla and cortices were uniform in texture with some increased echogenicity and mild loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. The left kidney measured 4.1 cm in length. The right kidney measured 4.8 cm in length.

Spayed Female

**AGE** **Adrenal Glands**  
 2011

**WEIGHT** The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 1.0 cm in length x 0.57 cm width at the caudal pole.

16.9 Pounds The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 1.4 cm in length x 0.52 cm width at the caudal pole.

**INTERPRETED BY Spleen**

R. McKenzie Daniel, DVM, DABVP (Canine and Feline) The spleen exhibited a finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. The capsule was smooth and regular without apparent expansion. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis. Acute to chronic inflammatory, neoplastic, or benign parenchyma changes were not noted.

**IMAGING PERFORMED BY Liver**

Rebekah Jakum, CVT ARDMS/RVT The liver exhibited generalized enlargement with maintained symmetrical capsule contour. Nonuniform hepatic parenchyma was present, exhibiting mild mixed echogenicity, evidence of parenchymal remodeling and multiple nondisruptive subtle hypoechoic intraparenchymal nodules, an example of nodule measured 1.1 cm in diameter.

**HOSPITAL NAME** Easton AH The gallbladder was non distended in size with mild gallbladder debris. No evidence of gallbladder or peripheral gallbladder inflammation. The cystic duct and common bile ducts were normal without evidence of dilation.

**REFERRING VET Gastrointestinal**

Dr. Nankman 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.

**INVOICE** 16246 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.

**DATE**

6/23/22



**PATIENT**

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

Sophia Drago

**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.

**SPECIES**

Canine

**Free Abdomen**

No omental masses, lymphadenopathy or peritoneal effusion was present.

**BREED**

Yorkie Mix

**ULTRASONOGRAPHIC FINDINGS**

**SEX**

Spayed Female

- Heterogeneous nodular to mildly irregular liver
- Mild gallbladder debris (non-mucocele)
- Mild chronic renal changes
- Minor pancreatic remodeling

**AGE**

2011

The diffuse hepatic changes are nonspecific with considerations, including vacuolar hepatopathy, chronic inflammatory/immune mediated disease, areas of nodular hyperplasia, hematopoiesis, possible fibrosis or other hepatopathy. The possibility of infiltrative neoplasia cannot be definitively excluded yet considered a less likely differential diagnosis. Assuming normal clotting status, using a 25-gauge needle, hepatic FNA for screening cytology is warranted. Hepatosupportive medications, including Denamarin and ursodiol may prove beneficial.

**WEIGHT**

16.9 Pounds

No overt evidence of significant pancreatic pathology, i.e., inflammation or neoplastic criteria. Mild age-related pancreatic changes and parenchymal remodeling owing to previous inflammation or low-grade to chronic pancreatitis could be possible. However, this is a nonspecific finding given the lack of reported gastrointestinal signs. Monitoring for evidence of cranial abdominal or subxiphoid discomfort on palpation in the area of the pancreas +/- spec CPL would be reasonable.

**INTERPRETED BY**

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

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**IMAGING PERFORMED BY**

Rebekah Jakum, CVT  
ARDMS/RVT



**HOSPITAL NAME**

Easton AH

**REFERRING VET**

Dr. Nankman

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**PATIENT**

Sophia Drago

**SPECIES**

Canine

**BREED**

Yorkie Mix

**SEX**

Spayed Female

**AGE**

2011

**WEIGHT**

16.9 Pounds

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**HOSPITAL NAME**

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**REFERRING VET**

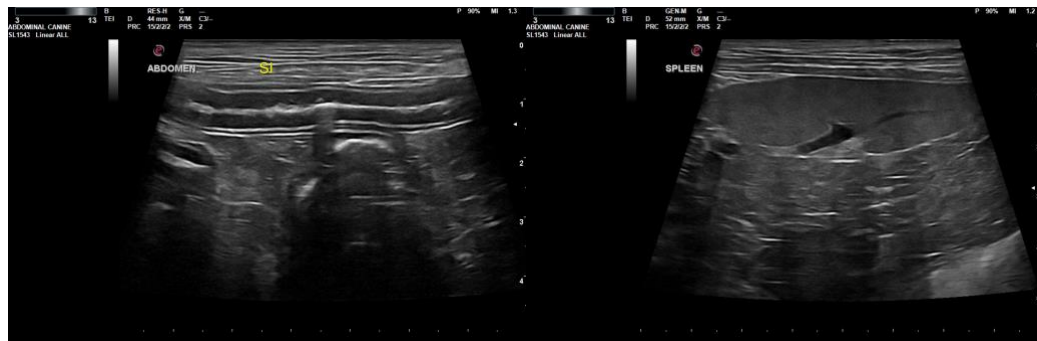
Dr. Nankman

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**PATIENT**

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Yorkie Mix

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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.

**R. McKenzie Daniel, DVM, DABVP (Canine/Feline Practice)**  
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