



**PATIENT**

Maggie Hagen

**SPECIES**

Canine

**BREED**

Mixed

**SEX**

FS

**AGE**

10 years

**WEIGHT**

11.6 lbs.

**PRESENTING CLINICAL SIGNS**

BCS 6/9. Pot bellied appearance. H/L wnl Plapation of the abdomen--tense but able to palpate--no overt abnormalities. Chem: NSF

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

The urinary bladder, trigone, and cystourethral junction 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 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. The medulla and cortices were uniform in texture with some increased echogenicity and minor 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 4.2 cm in length.

**Adrenal Glands**

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.49 cm width. The right adrenal glands was not definitively visualized.

**Spleen**

The spleen exhibited primarily finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. Multifocal, well-defined, symmetrical, hyperechoic nodules were present throughout the cranial to caudal parenchyma. An example of a splenic nodule measured 0.78 cm in diameter. 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 or neoplastic changes were not noted. The echogenic nodules tend to trend benign and are most consistent with benign hyperplasia or myelolipomas.

**Liver/ Gallbladder**

The liver presented mildly enlarged in size. The parenchyma of the liver was subjectively normal in echogenicity compared to the spleen and renal cortices. The liver parenchyma was uniform with a mildly coarse echotexture. The capsule of the liver was symmetrically rounded to mildly swollen in margination. The hepatic and portal vasculature were normal in appearance without signs of congestion. No evidence of hepatic congestion was noted.

The gallbladder was non distended in size with echogenic, nonmineralized, non dependent biliary sludge. The biliary sludge was non organized with a hypoechoic to anechoic, irregular to interrupted rim visible between the nondependent sludge and inner wall. No signs of peripheral inflammation.

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Dr. Raul Casas-Dolz

**HOSPITAL NAME**

State Avenue VC

**REFERRING VET**

Dr. Shelley Lenz

**INVOICE**

14559

**DATE**

8/11/22



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**Gastrointestinal**

The stomach presented intact wall layering with a normal wall layer ratio. Minor retained nonshadowing ingesta / chyme and luminal gas was present in the stomach with no evidence of gastric over-distention with significant retained ingesta, fluid, or foreign material. No over evidence of mechanical pyloric outflow obstruction or obstructive pyloric mural pathology was noted.

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 minor benign pancreatic parenchymal remodeling and incidental.

**Free Abdomen**

Potential mild Increase of omental fat was present. The omentum exhibited uniform echogenicity. No evidence of omental masses, lymphadenopathy, or peritoneal free fluid were noted.

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**ULTRASONOGRAPHIC FINDINGS**

- Subjective mild vacuolar hepatopathy pattern
- Partial/emerging gallbladder mucocele
- Minor age-related renal changes
- Benign splenic nodules - consistent with benign myelolipomas, potential for nodular hyperplasia or emerging splenic mineralization

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Overall, largely mild age-related abdomen without evidence of significant visceral pathology. The degree of hepatomegaly is not suspected to be resulting in abdominal distention. No evidence of intraabdominal neoplastic criteria was noted.

The emerging to partial gallbladder mucocele does not appear to be clinically significant at this stage, given the lack of hepatic enzyme elevations or cholestasis. However, continued monitoring for clinical signs and lab work abnormalities associated with the gallbladder mucocele going forward is suggested.

Empirical Ursodiol therapy may be considered.

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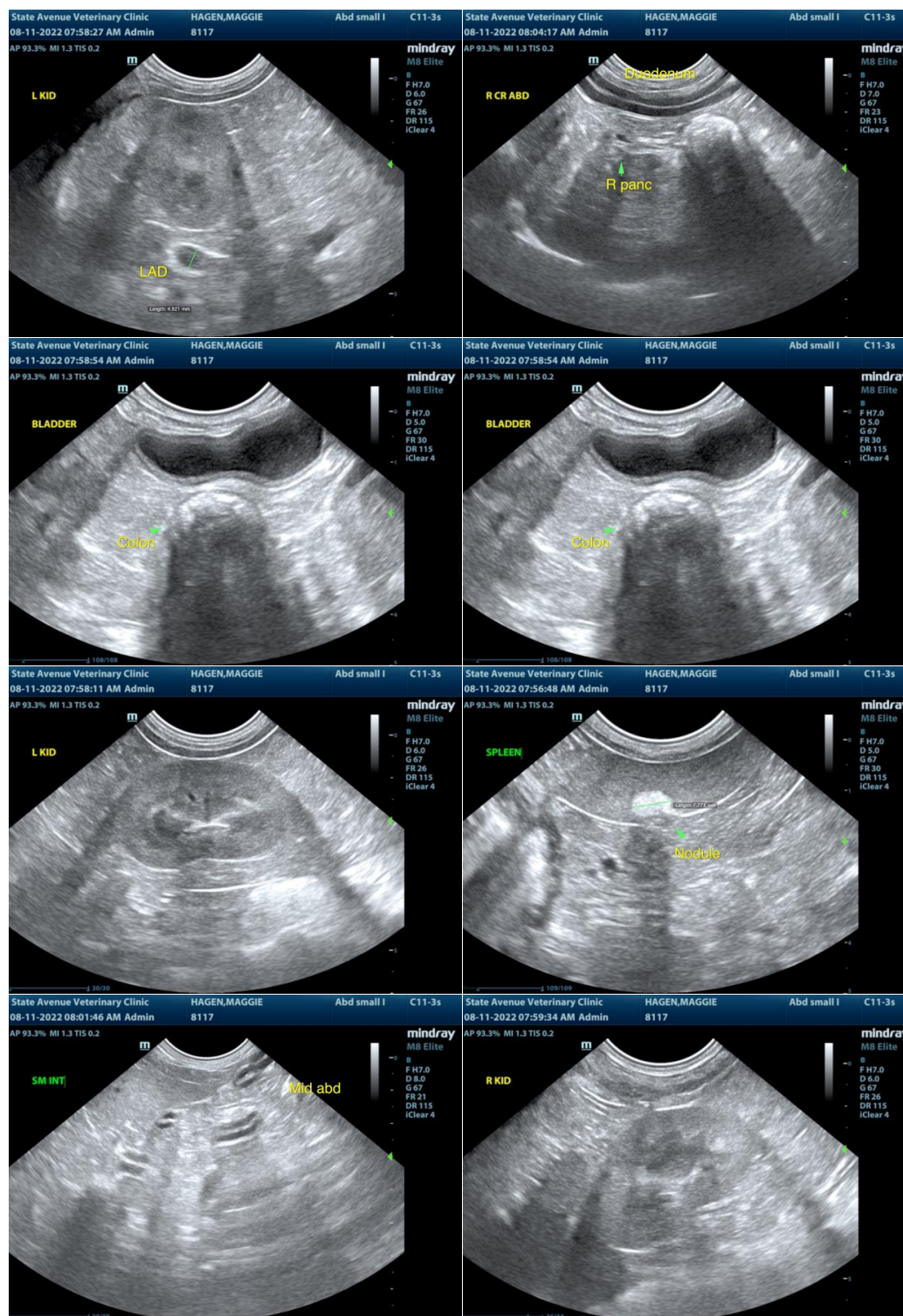
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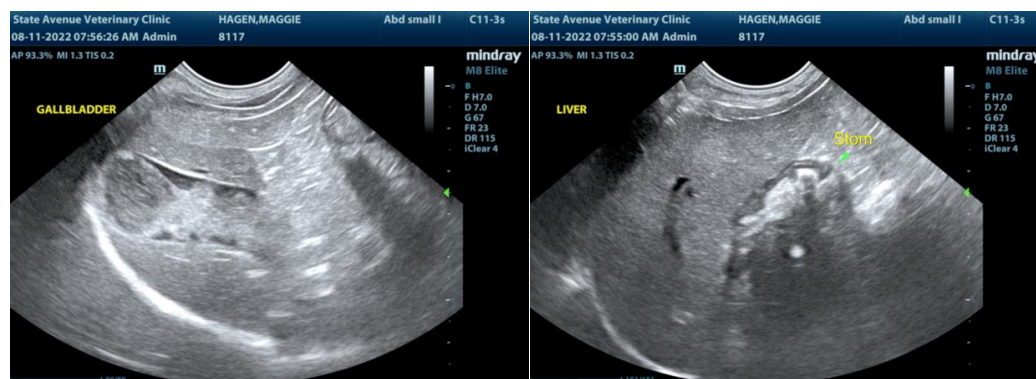
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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