



**PATIENT**

Cosmo Hays

**SPECIES**

Canine

**BREED**

Bichon

**SEX**

Neutered Male

**AGE**

13 Years

**WEIGHT**

5.4 kg

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Dr. Callihan

**HOSPITAL NAME**

Animal Emergency  
Care

**REFERRING VET**

Dr. Johnson

**INVOICE**

36496

**DATE**

3/28/22

**PRESENTING CLINICAL SIGNS**

Presented following a seizure at boarding facility where he has been staying past week. Long term diabetic, reportedly PU/PD whole week; history is sparse regarding dosing and consistency  
Abnormal PE/Chem/CBC/UA Results: Glucose on presentation ~ 476 mg/dL; t Bili mild elev 1.5, Cl 103; else normal CBC mild neutrophilia

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra exhibited normal thickness and tone. Primarily anechoic urine was present in the lumen. Non-dependent particulate sediment was present without evidence of calculus formation. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic mural changes were noted.

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 loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. The left kidney measured 4.5 cm. The right kidney measured 4.6 cm .

**Adrenal Glands**

The adrenal glands were uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 1.6 cm length x 0.47 cm at the caudal pole. The right adrenal gland measured 1.7 cm length x 0.46 cm at the caudal pole.

**Spleen**

The spleen exhibited primarily finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. Multifocal, well-defined, symmetrical, echogenic nodules were present in the medial parenchyma and primarily around the hilus. Example measured 0.60 cm 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**

The liver exhibited subjective mild enlargement. The liver parenchyma was mildly nonuniform and hypoechoic to the spleen with a moderate coarse echotexture and subjective mild to benign parenchymal remodeling. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was non distended in size with mild, non-dependent yet non-organized debris. The cystic duct and common bile ducts were normal without evidence of dilation.

**Gastrointestinal**

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach contained mild nonshadowing, yet variable echogenic ingesta, which could be consistent with recent meal ingestion. Correlation with clinical history recommended. If documented NPO, some degree of mild gastric stasis could be possible.

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.



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**Pancreas**

Cosmo Hays

The pancreas was normal in size and contour with heterogeneous to mildly echogenic parenchyma compared to adjacent omentum. Mild regional peripancreatic to cranial abdominal mildly hyperechoic yet uniform mesentery noted.

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**Free Abdomen**

No overt lymphadenopathy or peritoneal effusion was present.

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**ULTRASONOGRAPHIC FINDINGS**

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- Mild hepatic parenchymal remodeling – benign.
- Mild gallbladder debris (non-mucocele)
- Mild chronic renal changes – no evidence of pyelectasia.
- Minor particulate urinary bladder sediment
- Benign splenic nodules – consistent with probably myelolipomas. Potential for previous infarction or areas of emerging mineralization.
- Heterogeneous to mildly hyperechoic pancreas – subjective peripancreatic to cranial abdominal reactive mesentery.

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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**WEIGHT**

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Potential for low-grade to chronic pancreatitis with secondary mid to cranial abdominal reactive mesentery possible. However, given the lack of reported gastrointestinal signs, this finding is non-specific. No overt suspicion of underlying adrenal hyperfunctionality, given the adrenal presentation with suspected PU/PD secondary to hyperglycemia.

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Full urinary workup including urine culture and sensitivity suggested, given the likelihood of glucosuria. If strong clinical suspicion for adrenal hyperfunctionality, ACTH stimulation test in the face of diabetes could be considered. Overall, and obvious cause of the seizure activity in this patient was not overtly evident within the abdominal cavity. If continued seizure activity, potential intracranial imaging may be indicated.

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For an additional charge, internal medicine consult can be utilized through SonoPath.com. You can select the internal medicine drop down at <http://spa.sonopath.com/>.

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One of the world's top internists & SonoPath associate Dr. Remo Lobetti BVSc, MMedVet, PhD, DECVIM can evaluate your case through SonoPath. <https://sonopath.com/resources/sonopath-services/internal-medicine-teleconsultation-services>

**REFERRING VET**

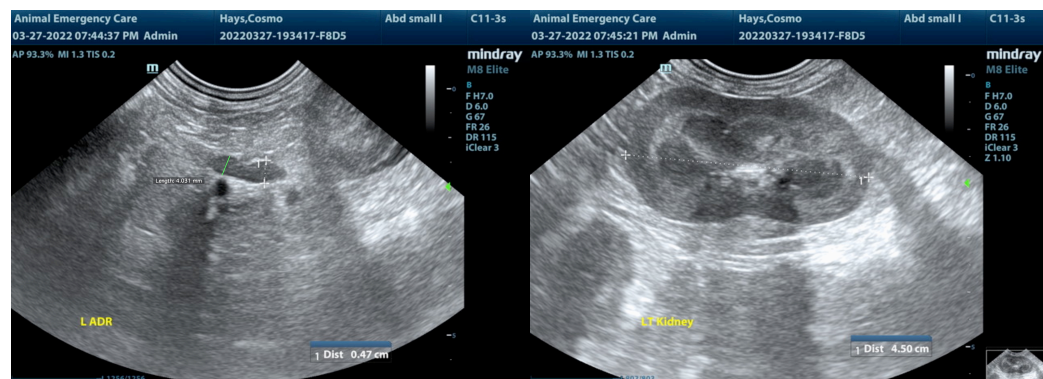
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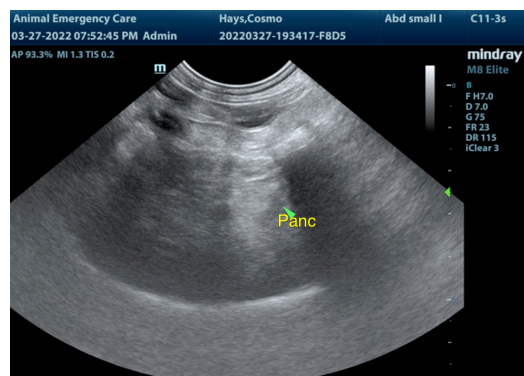
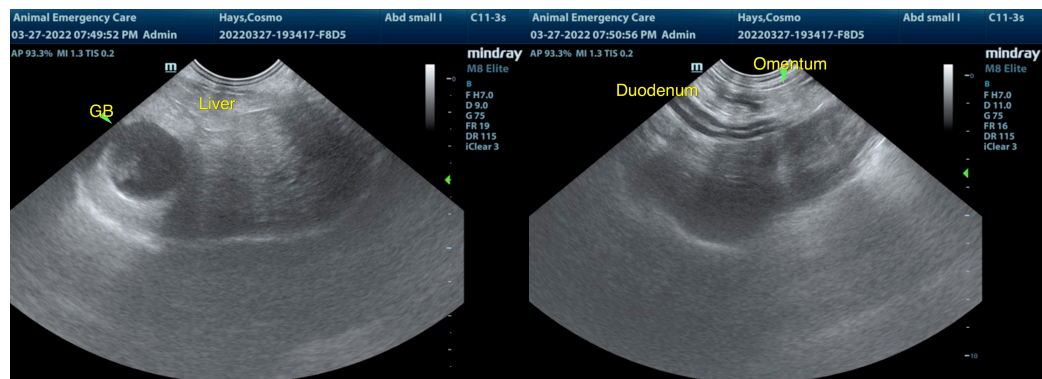
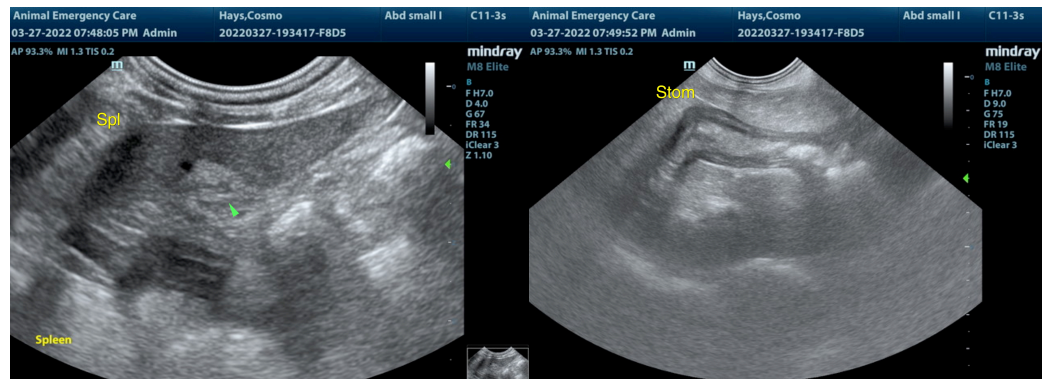
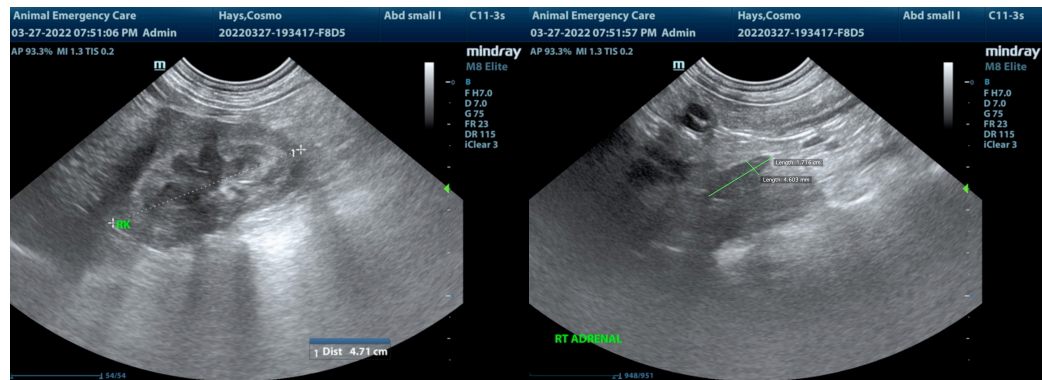
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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

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