

**PATIENT**

Hank Kleug

**SPECIES**

Canine

**BREED**

Chihuahua

**SEX**

Male (neutered)

**AGE**

9 years

**WEIGHT**

11.9 lbs

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Meghan Morse, LVT,  
CVT

**HOSPITAL NAME**

Orchard Grove AH

**REFERRING VET**

Dr. Cassano

**INVOICE**

10666

**DATE**

2/16/26

**PRESENTING CLINICAL SIGNS**

History:

- Card- Grade 3/6 HM
- Abd- Elevated LEZ (suspect Cushings but want to R/O GB disease)
- No current meds

Abnormal PE/Chem/CBC/UA Results: CBC: RBC 9.62, HCT 62.2, HGB 22.6 Chem: Chloride 104, TP 7.9, Alb 4.0, ALP 925, GGT 23, Amylase 316 Lyme + Snap, C6 14 USG 1.018 U/A: 50 ery/ul BLD

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

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.

The area of the residual prostate appeared normal and free of pathology

No evidence of pathology in the area of the aortic trifurcation.

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 mild loss of corticomodullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. Pinpoint hyperechoic medullary foci, which may indicate pinpoint areas of microinfarction, fibrosis, or mineralization. The left kidney measured 3.8 cm in length. The right kidney measured 4.3 cm in length.

**Adrenal Glands**

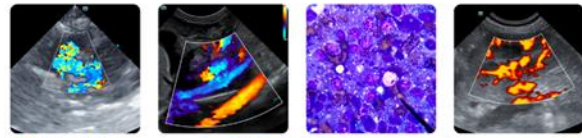
The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.53 cm width at the caudal pole. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.42 cm width at the caudal pole.

**Spleen**

The spleen exhibited primarily finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. Small to emerging, peri hilar to medial parenchymal nodules were present with potential for concurrent areas of medial capsule fibrosis. 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 was normal to possible borderline 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



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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. The gallbladder was non-distended in size containing primarily anechoic content with gravity-dependent, nonorganized gallbladder debris. The cystic and common bile ducts were normal.

***Gastrointestinal***

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach was empty without evidence of retained ingesta, fluid, 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 formed feces in lumen.

***Pancreas***

The parenchyma of the right pancreas was hyperechoic to adjacent omental fat with diffuse parenchyma remodeling. The capsule of the pancreas was mildly asymmetrical in contour without evidence of peripancreatic inflammation. These changes may suggest chronic inflammation, fibrosis, or saponification if previous history of pancreatitis. No overt signs of pancreatic neoplasia.

***Free Abdomen***

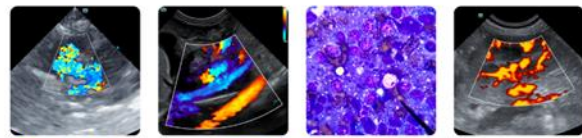
No overt lymphadenopathy or peritoneal effusion was present.

**ULTRASONOGRAPHIC FINDINGS**

- Benign hepatopathy – suggestive of vacuolar / nonobstructive cholestatic hepatopathy
- Mild nonorganized gallbladder debris (non mucocele)
- Bilateral mild chronic renal changes
- Normal adrenal glands
- Mild chronic pancreatitis / pancreatic fibrosis
- Hyperechoic splenic nodules with possible medial capsule fibrosis – benign, suggestive of emerging to mild myelolipomas

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Adrenal workup warranted if clinical signs consistent with Cushing's Syndrome are present, despite lack of adrenal enlargement or pathology. Hepatosupportive medications including Denamarin and Ursodiol are recommended with sonographic reassessment of the liver and gallbladder if evidence of progressive hepatopathy or cholestasis. There is no evidence of neoplastic criteria.



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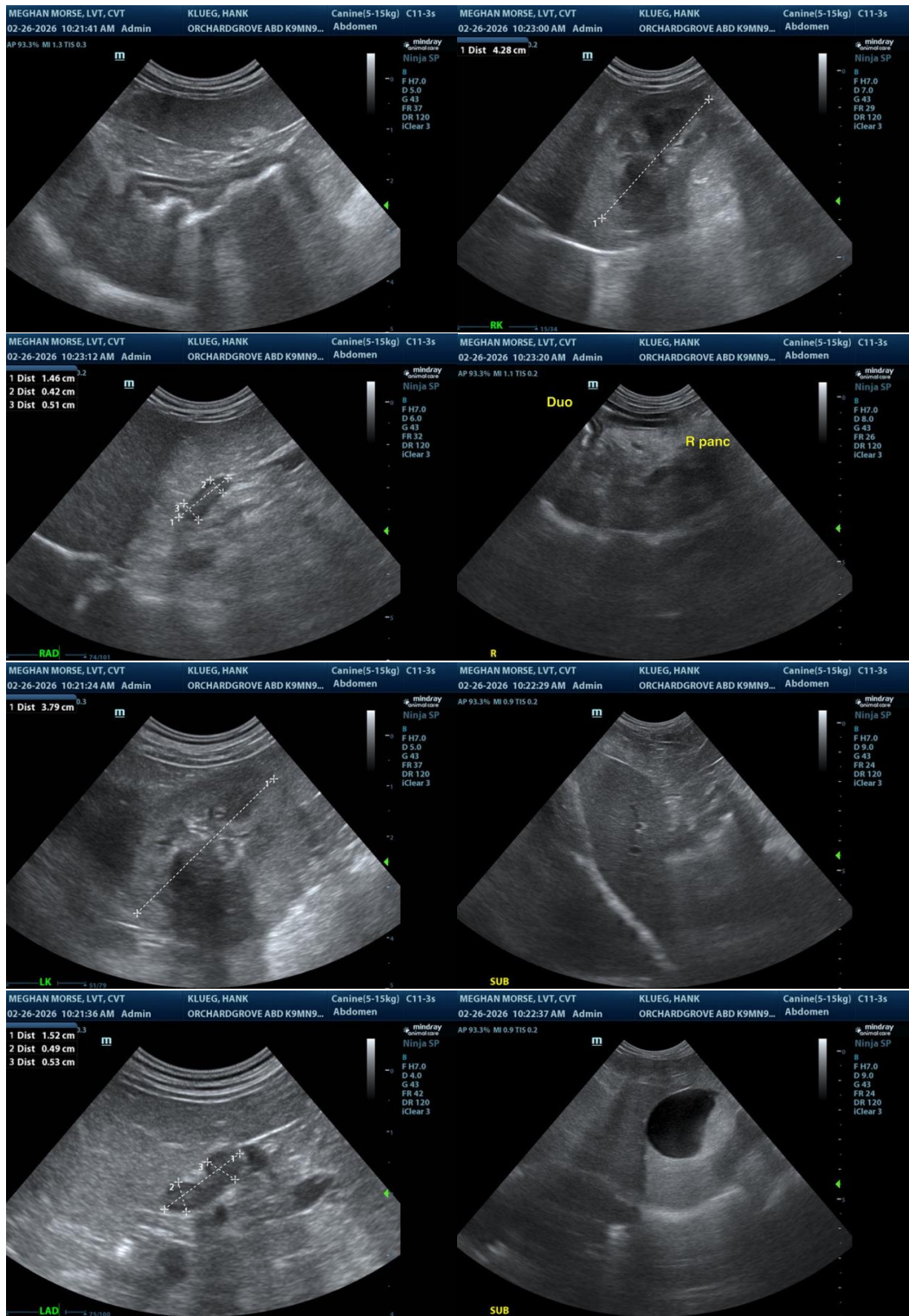
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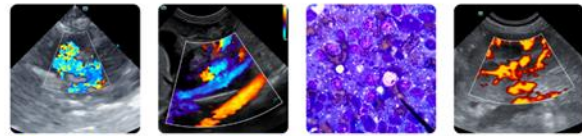
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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)  
[info@sonopath.com](mailto:info@sonopath.com)

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