

PATIENT PRESENTING CLINICAL SIGNS

Riggs Guest Blood in urine. No murmur. Echo performed due to breed and fact that he is a show dog. Just wanted to check everything while already performing scan. History of hypothyroidism and severe skin allergies. Nervous show dog that has been on Omeprazole and Metronidazole during times of showing. Thought prostate felt large and looked enlarged on xray, kidneys not easily visualized on rads either. Is on Clavaseptin. No murmur.

Canine Abnormal PE/Chem/CBC/UA Results: n/a
Patient sedated with Dexdomitor and Torbugesic

BREED ULTRASONOGRAPHIC EXAMINATION OF THE HEART & ABDOMEN

Doberman

SEX

Intact Male

AGE

5 Years

WEIGHT

43.2 Kg

INTERPRETED BY

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

IMAGING PERFORMED BY

Crystal Hill

HOSPITAL NAME

Grand River VH

REFERRING VET

Dr. HoralRobinson

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8/16/21

CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO (Boon method)	LA/AO (Heart Base; Swe)	FS (%)	EF (%)	EPSS (cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	<1.6	28-40	40-100	<0.6
PATIENT			NM	1.38	31.3	59.3	0.6
CANINE CARDIAC PARAMETERS	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT (kg)	LA 2D short axis Base view (cm)	LVIDd Avg; 2D and m-mode short axis (cm)	LVIDs Avg; 2D and m-mode short axis (cm)
NORMAL PARAMETER	50-100	0.7-1.7	0.7-1.6				
PATIENT	NM	1.0	0.9		4.5	4.5	

Cardiac Presentation

The echocardiogram in this patient demonstrated normal **left atrial** size based on 3 separate methods of LA evaluation. The cranial and caudal **mitral** valve leaflets presented normal linear structure, extension in systole, and union in diastole with normal kinesis. Trace centralized mitral valve insufficiency noted, likely owing to sedation. The **left ventricle** presented thicknesses with linear contour and was not dilated nor restricted. The **myocardium** presented normal echogenicity without subjective evidence of significant fibrotic or ischemic disease. **Contractility** of the ventricular walls was subnormal for this patient and breed, evidenced by the fractional shortening measurement and subjective evaluation of the different regions of the myocardium, likely owing to sedation. The **left ventricular outflow** tract demonstrated normal laminar flow and subjective structural integrity. The **right atrium** and auricle revealed normal size, structure and content. No evidence of masses was noted. **Tricuspid** valvular assessment demonstrated adequate linear morphology and kinesis. Trace tricuspid valve insufficiency noted on color doppler assessment. The **right ventricle** was of normal size (1/3 diameter of LV), chordae structure, myocardial echogenicity and thickness. **Pulmonary outflow** tract assessment revealed normal valve structure, laminar flow, and diameter (approx. 1:1 pa/ao ratio). No visible **pericardial** or free pleura fluid was noted. The cranial **mediastinum** and **pericardial** and **extra-cardiac** regions were free of masses in the visible window.



PATIENT *Urinary System*

Riggs Guest The urinary bladder 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.

SPECIES

Canine

The area of the aortic trifurcation was free of pathology.

BREED

Doberman

The prostate was enlarged in size with intact, symmetrical capsule contour. The margins of the gland were intact and able to be differentiated from the surrounding tissue. The prostatic parenchyma was mildly echogenic to heteroechoic without parenchymal mineralization. The prostate measured 6.7 cm x 6.7 cm. Anechoic, thinly walled parenchyma cysts were present. Post-prostatic urethra was normal to a depth of 5.0 cm.

SEX

Intact Male

Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio and normal corticomedullary definition were maintained. The echogenicity of the cortex was similar to or slightly less than normal liver parenchyma while the medulla echogenicity was hypoechoic to the cortex with no evidence of pelvic dilation. The left kidney measured 7.0 cm. The right kidney measured 8.1 cm. No evidence of pyelonephritis.

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Adrenal Glands

The adrenal glands were uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.66 cm at the cranial pole and 0.62 cm at the caudal pole. The right adrenal gland measured 0.89 cm at the caudal pole.

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Spleen

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.

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Liver

The liver was subjectively normal in size, structure, and contour. The liver parenchyma was uniform and hypoechoic to the spleen with a mild coarse echotexture. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was non-distended in size with thin walls and primarily anechoic luminal content. The cystic and common bile ducts were normal.

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Gastrointestinal

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach contained echogenic, nonshadowing ingesta most consistent with post prandial presentation without signs of ileus, obstruction or foreign material.

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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.

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

Pancreas

The parenchyma of the left limb, body and right limb of the pancreas presented isoechoic to the adjacent omental fat. A normal curvilinear capsule contour of the pancreas was present. The visible pancreatic duct was normal. No signs of active inflammation or neoplastic disease was evident.

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PRIMARY FINDINGS

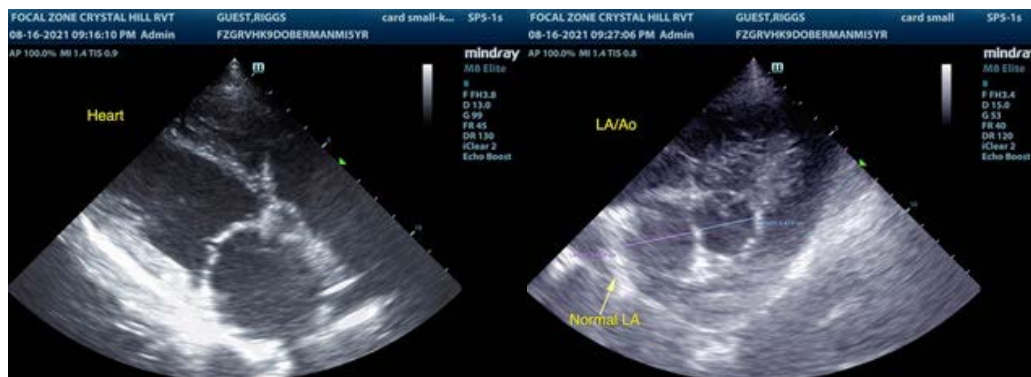
- Normal echocardiogram in light of breed and sedation
- Benign prostatic hyperplasia with small parenchymal cysts, minor potential for prostatitis
- Sonographically unremarkable urinary bladder and bilateral kidneys

SECONDARY FINDINGS

- Minor gastric ingesta – suspect post-prandial presentation, minor potential for some degree of metabolic gastric stasis if documented NPO

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Without overt evidence of renal or urinary bladder pathology, the reported hematuria may potentially be owing to the prostate in this patient. The overall appearance of the prostate is suggestive of benign prostatic hyperplasia with small parenchymal cysts, although mild prostatitis (which may present sonographically similar) cannot be definitively excluded. Further assessment would include prostatic sampling for cytology. Urine culture and sensitivity on sterile urine sample 7 days post completion of current antibiotic recommended. Off-label Finasteride may be considered given the assumption that neutering is not possible at this time.

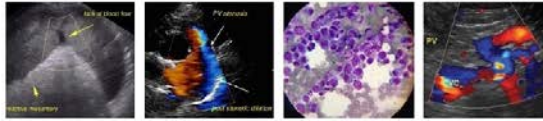


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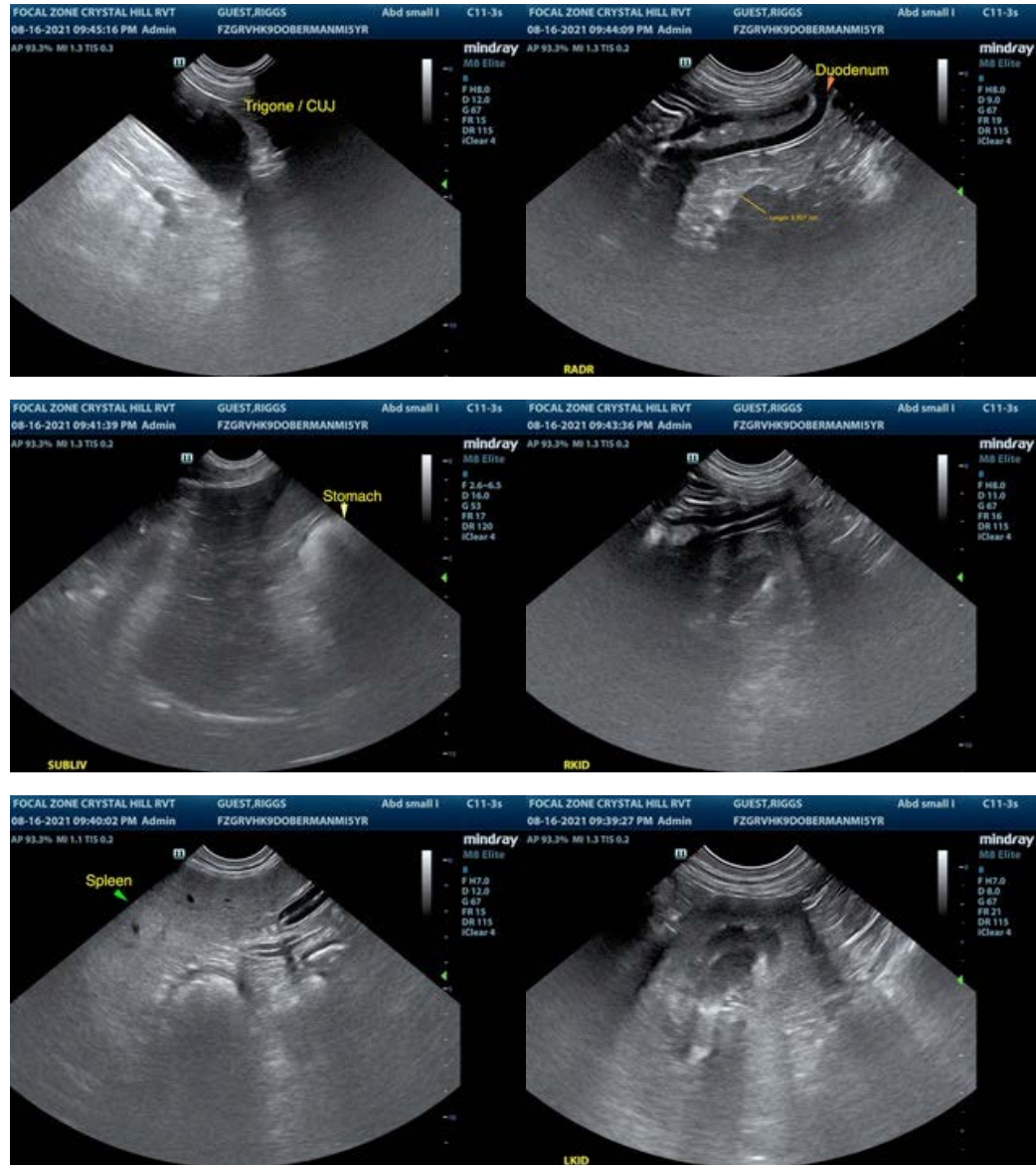
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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)
info@SonoPath.com