



PATIENT PRESENTING CLINICAL SIGNS

Lars Torrelee History: presented for stumbling, walking sideways, r/o musculoskeletal, infectious, toxic, hepatic dysfunction, vs congenital

SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE HEART & ABDOMEN

Canine

BREED

Pit Bull

SEX

Male

AGE

4 Months

WEIGHT

45 Lbs.

| 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 | 1.0 | 46.2 | 78.7 | 0.22 |
| 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 | 116 | 1.2 | 1.0 | -- | 3.0 | 3.3 | -- |

INTERPRETED BY

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

IMAGING PERFORMED BY

Jenn

HOSPITAL NAME

Rockaway AH

REFERRING VET

Dr. Maniar

INVOICE

13936

DATE

2/15/22

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. 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 adequate and in normal range for this patient evidenced by the fractional shortening measurement and subjective evaluation of the different regions of the myocardium. 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. 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 systolic flow, and diameter (approx.1:1 pa/ao ratio) with trace PV insufficiency on color doppler assessment. 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.

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 sediment or



| | |
|--|--|
| PATIENT | calculi. 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. |
| Lars Torreele | |
| SPECIES | Normal size and margination was 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 6.0 cm in length. The right kidney measured 6.5 cm in length. |
| Canine | |
| BREED | Adrenal Glands |
| Pit Bull | The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.38 cm width at the caudal pole. |
| SEX | The right adrenal gland was indistinctly visualized yet without overt pathology. The right adrenal gland measured 0.52 cm width at the caudal pole. |
| Male | |
| AGE | Spleen |
| 4 Months | 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. |
| WEIGHT | Liver |
| 45 Lbs. | 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. Hepatic vascular volume was normal. Overt evidence of an intrahepatic or extrahepatic shunt was not definitively evident. The gallbladder was non-distended in size with thin walls and primarily anechoic luminal content. The cystic and common bile ducts were normal. |
| INTERPRETED BY | Gastrointestinal |
| R. McKenzie Daniel, DVM, DABVP (Canine and Feline) | The stomach presented mild wall thickening secondary to echogenic mucosa hypertrophy. Intact wall layering was maintained and distinct. The gastric body wall, including prominent mucosa measured 0.78 cm width. The stomach was empty. |
| IMAGING PERFORMED BY | HOSPITAL NAME |
| Jenn | 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. The jejunum wall measured 0.40 cm. |
| HOSPITAL NAME | REFERRING VET |
| Rockaway AH | Normal visible colon wall layers were present with apparent formed feces in lumen. |
| REFERRING VET | Pancreas |
| Dr. Maniar | 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. |
| INVOICE | Free Abdomen |
| 13936 | No overt lymphadenopathy or peritoneal effusion was present. Omental echogenicity was normal. |
| DATE | ULTRASONOGRAPHIC FINDINGS |
| 2/15/22 | |



PATIENT

Lars Torreele

- Overtly normal cardiac structure and function

SPECIES

Canine

- Trace PV insufficiency

- Gastritis

- Sonographically unremarkable liver, exhibiting subjective normal vascular volume

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

BREED

Pit Bull

No overt evidence of structural or functional cardiomyopathy, including no evidence of systolic dysfunction, significant valvular insufficiencies, stenotic disease or overt shunt. No overt indication of a cardiogenic cause of the patients clinical signs.

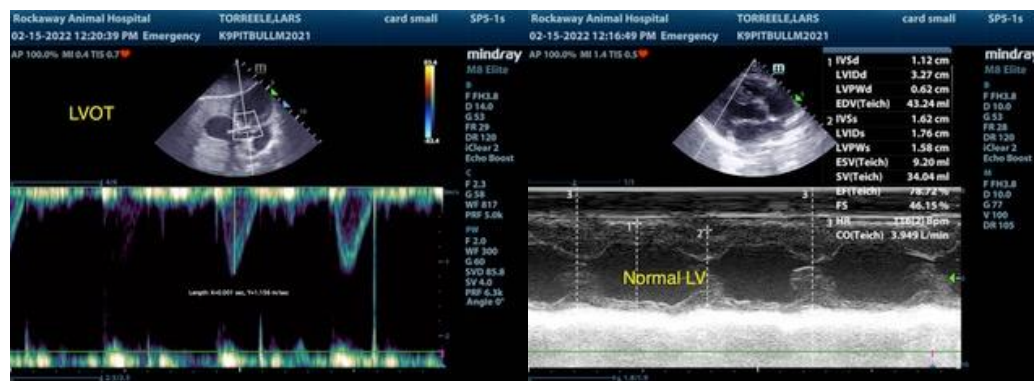
SEX

Male

Overt evidence of a portosystemic vascular anomaly was not definitively evident. Correlation with hepatic enzyme elevation +/- bile acids, if clinically indicated, could be considered. Although, considered unlikely, adrenal screening with resting cortisol, to rule out occult Addisons disease, could be considered. If evidence of vomiting or inappetence, gastroprotectant protocol recommended.

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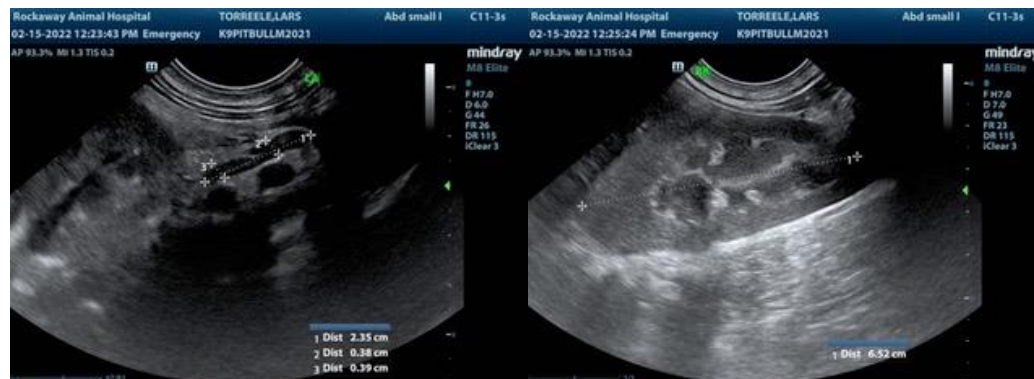
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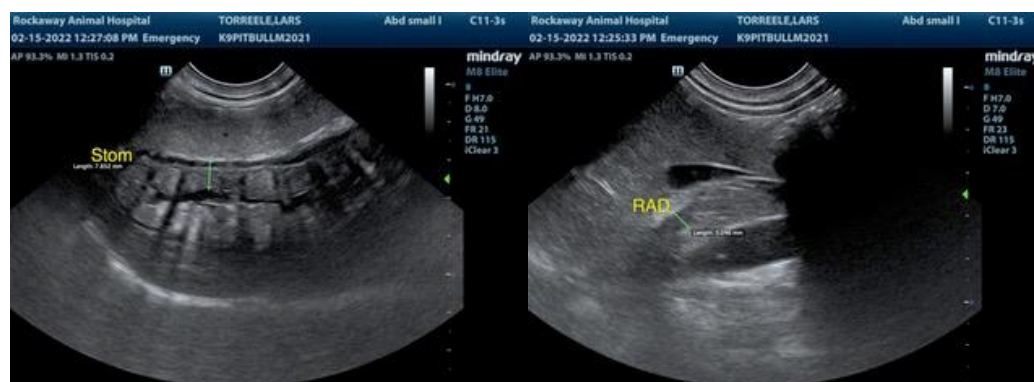
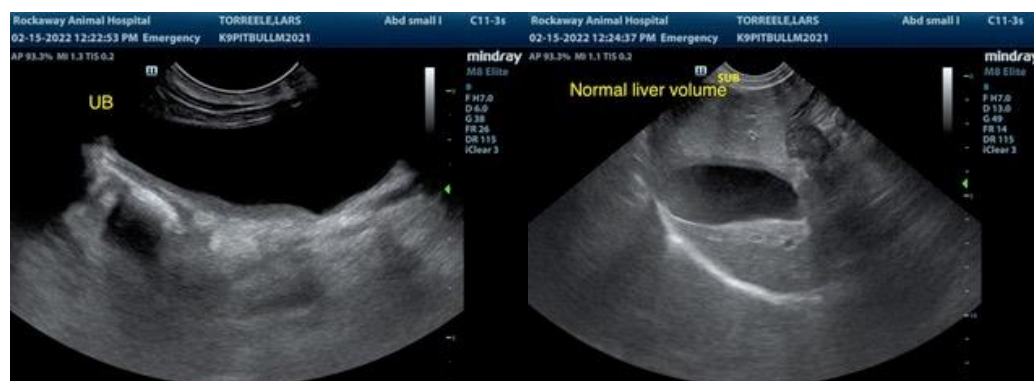
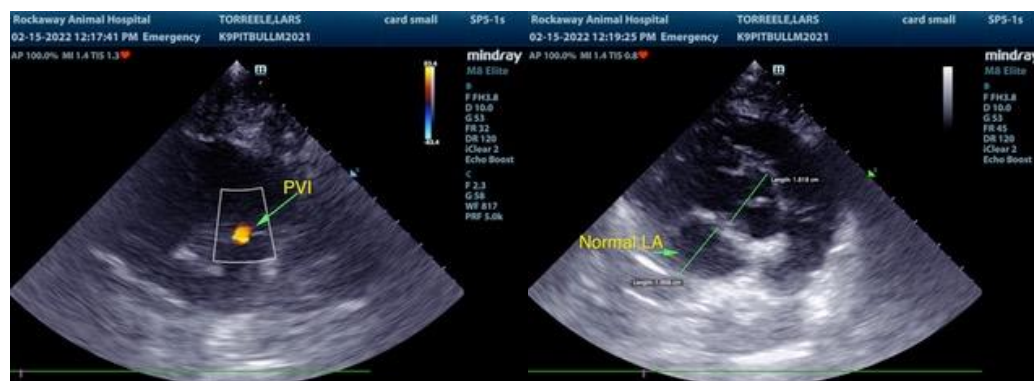
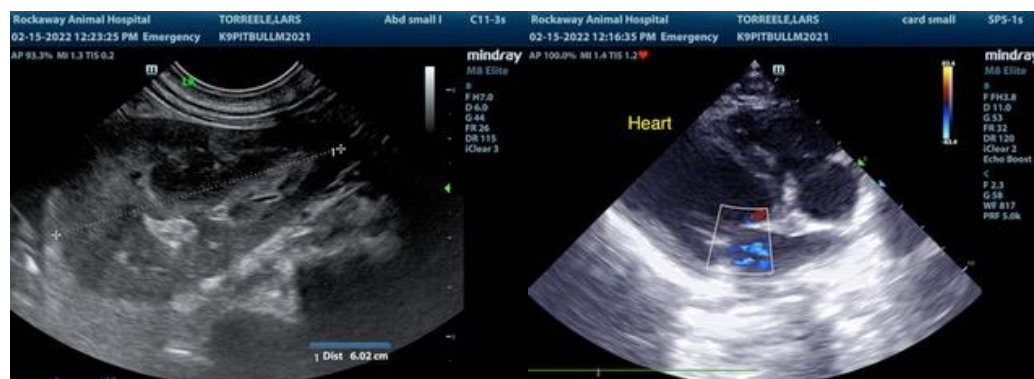
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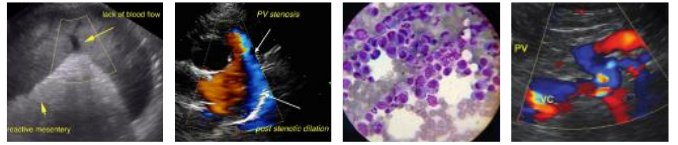
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The information and recommendations provided are based on the images presented by the



PATIENT

Lars Torreele

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.

SPECIES

Canine

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info@SonoPath.com

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