



## PATIENT

Mack Colasurdo

## PRESENTING CLINICAL SIGNS

History: increased RR wheezing poss cardiomegaly on rads increased GGT

## SPECIES

Feline

## ULTRASONOGRAPHIC EXAMINATION OF THE HEART & ABDOMEN

## BREED

DSH

## SEX

Neutered Male

## AGE

7 Years

## WEIGHT

10 Pounds

FELINE CARDIAC PARAMETERS	BODY WEIGHT (kg)	HR (BPM)	IVSd (cm)	LVIDd (cm)	LVWd (cm)	FS (%)	EF (%)
NORMAL PARAMETER	-----	150-240	0.3-0.6	1.0-2.1	0.25-0.6	35-67	80-100
PATIENT		159	0.47	1.44	0.51	49	83.5
FELINE CARDIAC PARAMETERS	LA/AO (Boon)	LA/AO HEART BASE (Sisson)	LA 2D 4-chamber long axis AS to FW (Sisson) (cm)	LVOT VEL. (m/s)	RVOT VEL. (m/s)	IVRT (m/)	
NORMAL PARAMETER	<1.5	0.88-1.79	0.7-1.7	<1.6	<1.3	40-60	
PATIENT	--	1.7	1.44	--	0.71	NM	

Adapted from June Boon, Veterinary Echocardiography, 1998  
Sisson D et al. JVIM 1991; 5: 232, Jacobs et al. Am J Vet Res 1985; 46:1705

### Cardiac Presentation

The echocardiogram in this patient demonstrated normal **left atrial** size based on 3 separate LA measurements. The cranial and caudal **mitral** valve leaflets presented normal linear structure and kinetics. The **left ventricle** presented normal 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 and angles 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 or chamber overload. **Tricuspid** valvular assessment demonstrated adequate linear morphology and kinetics. Minor TR present on doppler. The **right ventricle** was of normal size (1/3 diameter of LV), chordae structure, myocardial echogenicity and thickness. **Pulmonic** 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 or extra cardiac pathology in the visible planes. The cranial **mediastinum and pericardial 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 2.0 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. Aortic trifurcation was normal.

## INTERPRETED BY

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

## IMAGING PERFORMED BY

Jenn

## HOSPITAL NAME

Rockaway AH

## REFERRING VET

Dr. Maniar

## INVOICE

16232

## DATE

6/23/22



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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. A hyperechoic corticomedullary band, consistent with a medullary rim sign, was present. This is a nonspecific finding seen in both normal and abnormal kidneys. It may be associated interstitial renal disease, hypercalcemia, tubular necrosis, lymphoma, and FIP. However, it is a nonspecific finding. The left kidney measured 4.3 cm. The right kidney measured 4.4 cm.

**Adrenal Glands**

Both adrenal glands were indistinctly visualized yet without overt pathology and subjective normal size, position and shape with the left adrenal gland measuring 0.40 cm and the right adrenal gland measuring 0.43 cm in width.

**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. The spleen measured 0.96 cm in width at the level of the hilus.

**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.

**Gastrointestinal**

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach contained moderate ingesta, exhibiting subtle progressive distal acoustic shadowing.

The small intestine presented intact wall layering with 1:3 muscularis/mucosa ratio. Segmental areas of mildly hyperechoic nonshadowing chyme were present. No evidence of mechanical or metabolic small intestinal ileus pattern.

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.

**Free Abdomen**

A solitary enlarged probable colic lymph node (0.88 cm) was present, medial to the right kidney. The lymph node was homogenous, mildly hypoechoic and smoothly marginated. A normal width: length ratio was maintained (<0.5). Evidence of perilymphatic inflammation was evident.

No other evidence of additional lymphadenopathy or peritoneal free fluid.



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**ULTRASONOGRAPHIC FINDINGS**

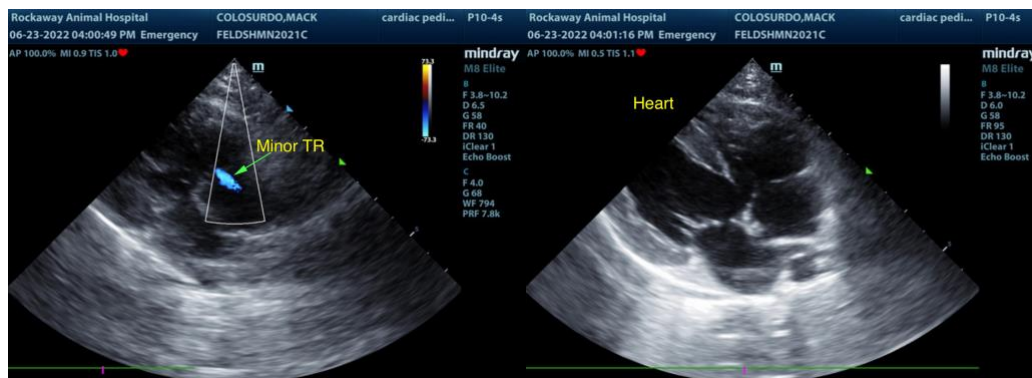
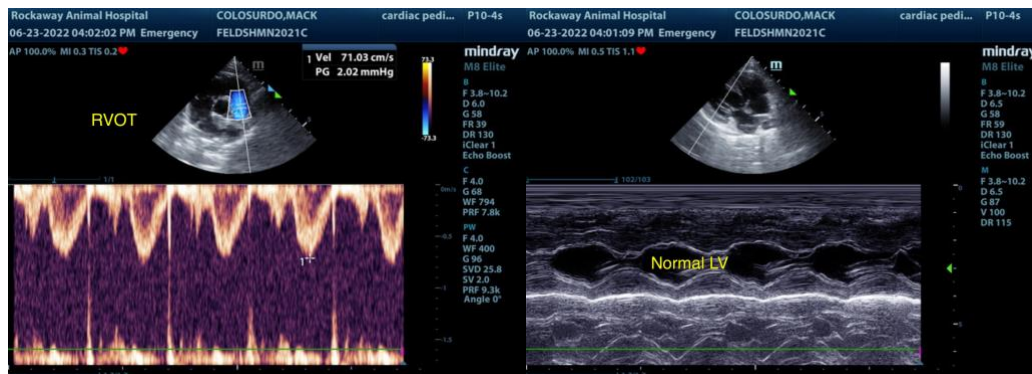
- Overtly normal cardiac structure and function
- Bilateral nonspecific renal medullary rim sign
- Overtly normal gastrointestinal tract with gastric and segmental small intestinal ingesta/chyme-suspect postprandial presentation.
- Probable focal nonspecific mild colic lymphadenopathy- incidental lymphoid hyperplasia or minor reactive lymphadenitis suspected

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

No evidence of structural or functional cardiomyopathy, including no evidence of clinical issues, such as HCM criteria, LV systolic dysfunction, overt or significant left or right heart chamber enlargement, significant valvular insufficiencies or evidence of clinical pulmonary hypertension.

The cardiac presentation was not overtly consistent with a cardiogenic component to the increased resting respiration rate. Considerations for suspected primary lower airway disease indicated. No indication for cardiac medications.

Overall, no overt evidence of significant abdominal visceral pathology. Sonographic monitoring of the probable colic lymph node, for evidence of progression or regression, could be considered. Potential for emerging neoplastic colic lymphadenopathy is considered a less likely potential.





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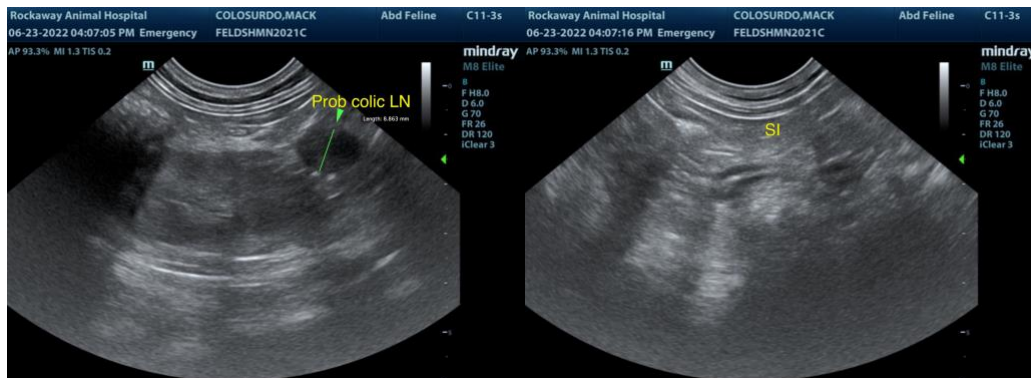
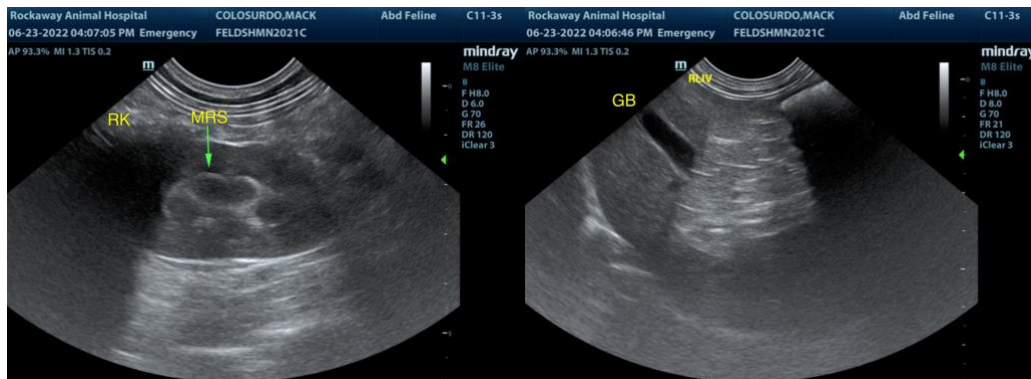
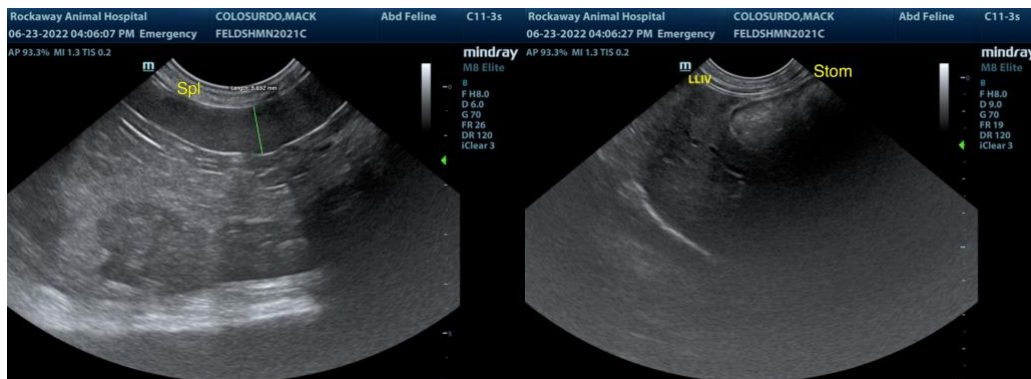
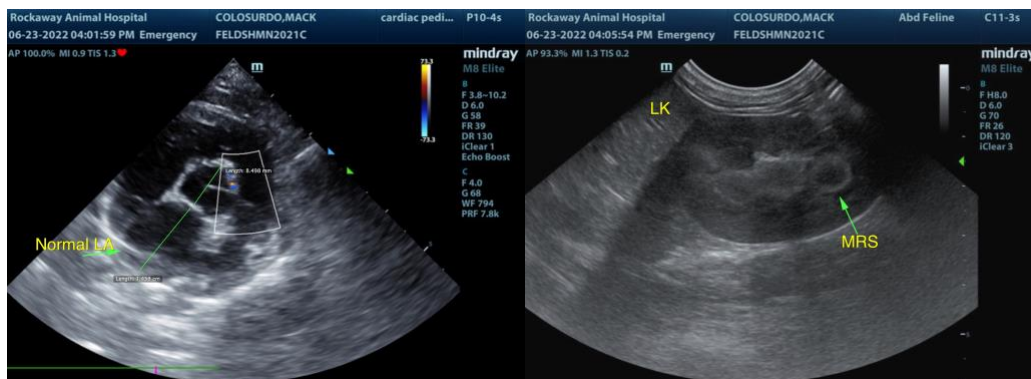
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.



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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.

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**info@SonoPath.com**

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