
PATIENT PRESENTING CLINICAL SIGNS

Marley Monster Chan

Presented 12-16 for pitting edema of the tail and right hind leg. Abdominal fluid wave noted on palpation. Per O/ pt is active, happy and eating well. Previous history of Grade 2/6 right base murmur
 Current Medications Solenia given 12-16

SPECIES

Feline

Abnormal PE/Chem/CBC/UA Results: Glucose 66 g/dl . All other values WNL. See attached labs.

BREED

DSH

SEX

MN

AGE

17yr

WEIGHT

11.2lb

INTERPRETED BY

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

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN AND HEART

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		NM	0.47	1.7	0.46	35.3	70
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	1.9	2.5	2.1		0.9	1.4	
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 left ventricular wall was mildly remodeled with regions of asymmetry yet normal IVS and free wall thickness present. Diffuse mildly hyperechoic endocardium consistent with fibrosis with concurrent mildly prominent to remodeled papillary muscles was present. LV systolic function is adequate yet subjectively mildly decreased. LV/RV are both borderline dilated. The left atrium was moderately dilated and mildly bulbous in appearance. Anechoic content was present within the left atrium without overt spontaneous contrast or thrombus. The right atrium exhibited concurrent enlargement comparable to the left atrium with anechoic content. The mitral valve was mildly thickened with mild eccentric MR. No obvious TR was observed. Blood flow through the LVOT/RVOT was normal in measured velocity. Mild to moderate aortic insufficiency was present on Doppler. Scant pericardial effusion was present without overt evidence of concurrent pleural effusion. No obvious cardiac tumors or arrhythmia.

Urinary System

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 2 cm exhibited normal thickness and tone. Anechoic urine was present in the lumen with moderate particulate sediment. The sediment may indicate cellular debris / protein, crystalline debris, lipid, or mucus. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes were noted.

IMAGING PERFORMED BY

Jenna Walsh CVT

HOSPITAL NAME

Santa Clara Animal Hospital

REFERRING VET

Dr. Thomas

INVOICE

12494ag

DATE

12/20/2022



PATIENT	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 moderate loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. The left kidney measured 3.7 cm in length. The right kidney measured 4.2 cm in length
Marley Monster Chan	
SPECIES	
Feline	No evidence of distal aortic thrombus.
BREED	The area of the iliac trifurcation was free of pathology including no evidence of medial, iliac or sublumbar lymphadenopathy.
DSH	Adrenal Glands
SEX	The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.4 cm width. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.43 cm width.
MN	
AGE	Spleen
17yr	The spleen exhibited a mildly congested appearance with homogeneous 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. No evidence of neoplastic criteria. The spleen measured 1.0 cm in width at the level of the hilus.
WEIGHT	Liver
11.2lb	The liver presented enlarged in size with symmetrical yet swollen contour. The parenchyma exhibited conserved uniform parenchyma with normal echogenicity isoechoic to the spleen and falciform fat. Intermittent small intraparenchymal cysts as well as a solitary probable benign cystic biliary adenoma were present in the right lateral to caudate liver measuring 2.2 cm in diameter. Subjective dilated cranial abdominal caudal vena cava at the level of the liver and diaphragm was present measuring 0.77 cm in diameter without evidence of vena cava thrombus. Minor gallbladder wall edema was present. The common bile duct was free of pathology.
INTERPRETED BY	Gastrointestinal
R. McKenzie Daniel, DVM, DABVP (Canine and Feline)	The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach contained retained nonshadowing echogenic fluid and chyme with no signs of ileus, obstruction or foreign material.
IMAGING PERFORMED BY	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.
Jenna Walsh CVT	Normal visible colon wall layers were present with apparent formed feces in lumen.
HOSPITAL NAME	Pancreas
Santa Clara Animal Hospital	The pancreas was normal in size with mild capsule asymmetry. The pancreas exhibited isoechoic to heterogeneous parenchyma compared to adjacent omentum. Suspect pancreatic edema. Minor potential for low-grade or chronic inflammation. No signs of neoplasia.
REFERRING VET	Free Abdomen
Dr. Thomas	
INVOICE	
12494ag	
DATE	
12/20/2022	



PATIENT
Marley Monster Chan

Moderate volume anechoic peritoneal free fluid. No omental masses or overt lymphadenopathy was present with primarily normal omental echogenicity.

SPECIES

Feline

BREED

DSH

SEX

MN

AGE

17yr

WEIGHT

11.2lb

ULTRASONOGRAPHIC FINDINGS

- Unclassified cardiomyopathy exhibiting LV myocardial remodeling and biatrial enlargement
- Mild eccentric MR
- Aortic insufficiency
- Congestive hepatopathy pattern with probable benign solitary cystic biliary adenoma
- Moderate volume peritoneal and scant volume pericardial effusion
- Urinary bladder sediment
- Bilateral chronic renal changes

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Potential burn out or end stage HCM may present in a similar manner. The degree of biatrial enlargement and LV systolic dysfunction is consistent with CHF as a primary cause of the effusion in this patient. No overt evidence of thrombus formation yet this patient is at increased risk of recurrent to progressive CHF, development of malignant arrhythmias and blood clots. Pimobendan 0.3 mg/kg PO BID, Lasix 1-2 mg/kg PO BID and Clopidogrel 75 mg tab ¼ tab PO SID is recommended. Monitoring of renal parameters, systemic BP +/- ECG is suggested. Correlation with peritoneal effusion analysis +/- cytology and C/S if clinically indicated is recommended. A guarded prognosis is indicated.

INTERPRETED BY

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

IMAGING PERFORMED BY

Jenna Walsh CVT

HOSPITAL NAME

Santa Clara Animal
Hospital

REFERRING VET

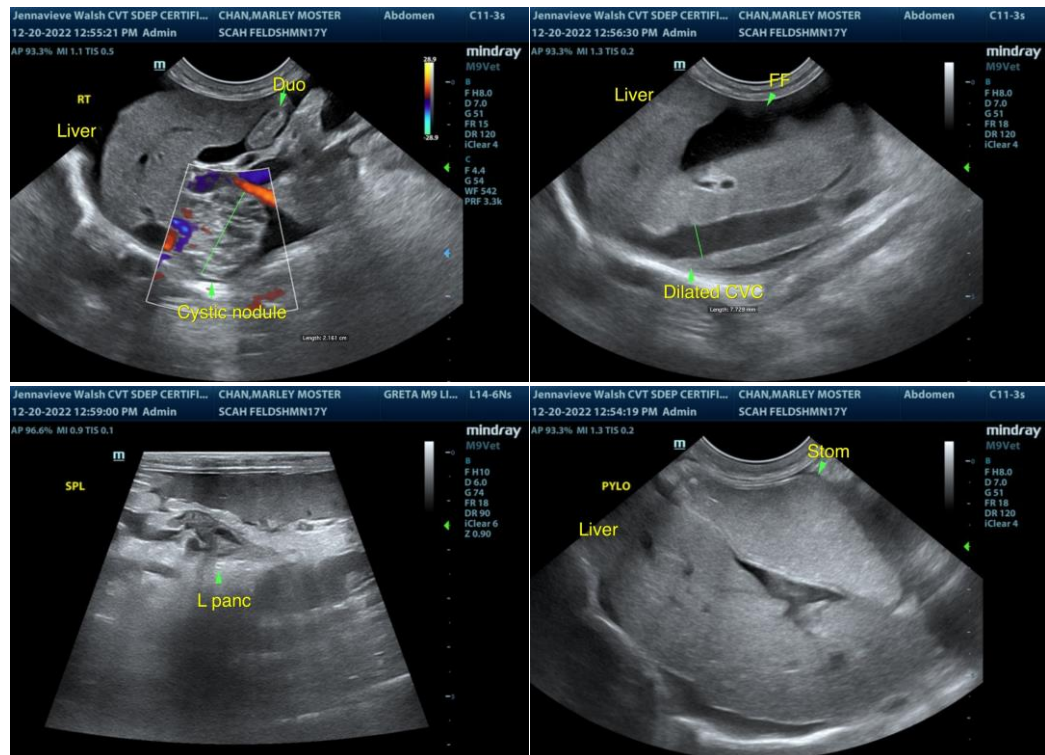
Dr. Thomas

INVOICE

12494ag

DATE

12/20/2022





PATIENT

Marley Monster Chan

SPECIES

Feline

BREED

DSH

SEX

MN

AGE

17yr

WEIGHT

11.2lb

INTERPRETED BY

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

IMAGING PERFORMED BY

Jenna Walsh CVT

HOSPITAL NAME

Santa Clara Animal
Hospital

REFERRING VET

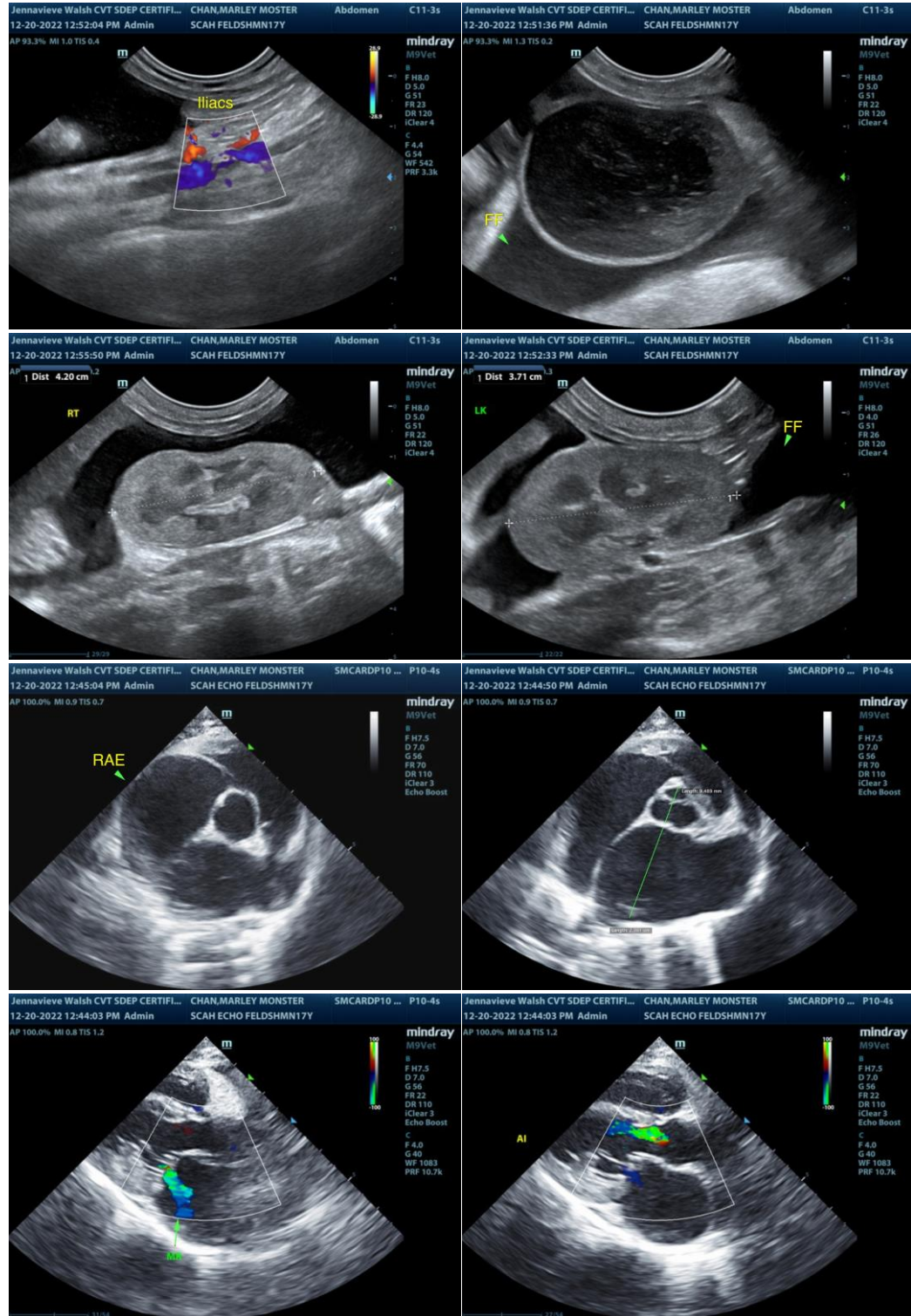
Dr. Thomas

INVOICE

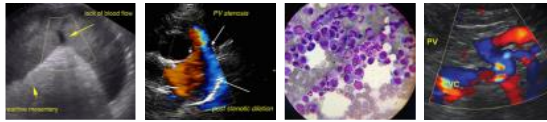
12494ag

DATE

12/20/2022



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



PATIENT visible in the image/video clips provided.

Marley Monster Chan

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

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)

Feline

info@SonoPath.com

BREED

DSH

SEX

MN

AGE

17yr

WEIGHT

11.2lb

INTERPRETED BY

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

**IMAGING
PERFORMED BY**

Jenna Walsh CVT

HOSPITAL NAME

Santa Clara Animal
Hospital

REFERRING VET

Dr. Thomas

INVOICE

12494ag

DATE

12/20/2022