



PATIENT

GusGus Johnson

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

13 Years 8 Months

WEIGHT

9.3 kg

INTERPRETED BY

James Wood, DVM,
DACVIM (Cardiology)

IMAGING PERFORMED BY

Renee Trionfetti, VMD

HOSPITAL NAME

Cypress VC

REFERRING VET

Laura Johnson, VMD

INVOICE

37296

DATE

6/2/26

PRESENTING CLINICAL SIGNS

History: Echo to further evaluate a gallop arrhythmia, and 2/6 systolic murmur. P-220, RR 40. Lungs sounds wheezes. O reported coughing a little more and sticking tongue out more. Otherwise doing well at home. PMHx: Hyperthyroidism tx w/ I-131, Feline Asthma, Nasal discharge, obesity, OA

Meds: Flovent inhaler prn, apoquel prn, gabapentin prn, cosaquin SID

Abnormal PE/Chem/CBC/UA Results: Blood Pressure (no sedation): 100, 110, 91 mmHg April 2026 - T4: 1.9-n No further reported BW abnormalities.

ULTRASONOGRAPHIC EXAMINATION OF THE 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	9.3	180	0.66	1.35	0.53	43.7	--
FELINE CARDIAC PARAMETERS	LA/AO (M-mode)	LA/AO HEART BASE (Sisson)	LAD LA MAX 4 Chamber		LVOT VEL. (m/s)	RVOT VEL. (m/s)	IVRT (m/)
NORMAL PARAMETER	<1.5	1.6	0.7-1.7		<1.6	<1.3	40-60
PATIENT	1.6	1.5	1.5		0.56	0.78	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 left atrium is high normal in size. No evidence of spontaneous echocontrast or intracardiac thrombi on the provided images. The mitral valve leaflets are normal and there is no mitral regurgitation. There is no evidence of systolic anterior motion of the mitral valve and no evidence of a left ventricular outflow tract obstruction. There is mild concentric hypertrophy of the interventricular septum. The right atrium is normal. The tricuspid valve is normal with mild central tricuspid regurgitation. The right ventricle appears to have preserved systolic function subjectively. The aortic and pulmonary valves are normal without evidence of insufficiency. Aortic and pulmonary outflow velocities are within normal limits. The aorta and PA are normal along with the associated PA branches. There is no evidence of pleural effusion, pericardial effusion, or intracardiac masses.

ULTRASONOGRAPHIC FINDINGS

- Hypertrophic cardiomyopathy phenotype – ACVIM stage B1 (high normal LA size)



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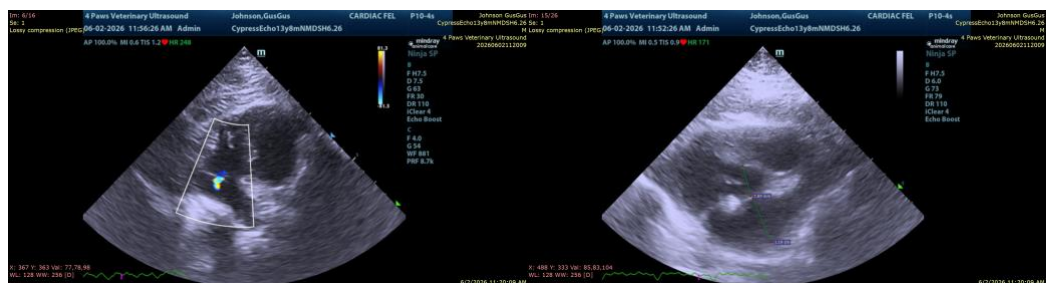
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The echocardiogram revealed thickening of the left ventricular walls. This is consistent with a hypertrophic cardiomyopathy phenotype, or HCM. In HCM, there is hypertrophy (thickening) of the muscle fibers that make up the walls of the heart. Many cases are a primary heart muscle disease (genetic in origin), however in some cases this can be a secondary process that may improve with treatment of the underlying condition (i.e. high blood pressure or hyperthyroidism among others). A blood pressure and total T4 are recommended in cats >6yr to rule these out as underlying causes (if not already performed). Regardless of the cause, the thickening causes diastolic dysfunction, and progressive left atrial enlargement. Eventually, cats with left atrial enlargement are at risk of developing congestive heart failure (pulmonary edema, pleural effusion, or both), blood clot formation and arrhythmias/sudden death. Some cats with mild HCM may live a normal lifespan with no further progression of disease. However, it is also possible that his HCM will progress over time and further therapy may be required for congestive heart failure, blood clots, or arrhythmias.

Fortunately, this patient does not have evidence of significant left atrial enlargement, so the risk of adverse cardiovascular outcomes is considered low at this time. No cardiac medications are recommended at this stage of the disease, but a recheck echocardiogram is recommended in 9-12 months to determine if there is any progression.

Given the lack of significant left atrial enlargement, the reported respiratory signs are not likely due to congestive heart failure. However, baseline thoracic radiographs are reasonable given the reported coughing. Coughing is a more frequent clinical sign with underlying airway disease rather than heart disease.

It is very important to catch any clinical signs concerning for emerging CHF as early as possible. The client should be closely monitoring and ideally tracking the sleeping respiratory rate. The sleeping RR should be between 10-30 breaths per minute or less (ideally in the teens or low 20s). **If the resting RR is trending upward**, consistently >35/min while resting/sleeping, the patient should be seen urgent for evaluation to determine if CHF is developing. If your pet is ever unable to use one or more of their limbs, seek emergency veterinary attention. *RECHECK ASAP for thoracic radiographs if there is increase in RR to detect early CHF and avoid ER presentation**



The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology



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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.

James Wood, DVM, DACVIM (Cardiology)

info@SonoPath.com