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ECHOCARDIOGRAPHY REPORT - CARDIOLOGY & INTERVENTIONAL MEDICINE SERVICE
THE OHIO STATE UNIVERSITY VETERINARY MEDICAL CENTER
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Patient Number: 000 **452711**
Patient Name: **Sweeney, Highlander Peterbuilt**
Date of study: **12/11/2015**
Diagnosing Cardiologist: **JDB**

Species: **FEL**
Breed: **Maine Coon**
Age: **4**
Birthdate: **01/17/2011**

Sex : **Male**
Weight (kg): **8.2 kg**
BSA: **0.41 m²**
Systolic BP:

Diagnosis & Recommendations

Normal Echocardiogram for breed and size of this male cat
LA and LV size are within normal limits for breed/sex/weight
No evidence of cardiomyopathy
Normal diastolic function (JDB)
WNL+*C

Clinical Findings

The echocardiogram was performed as a screen for hypertrophic cardiomyopathy (HCM) phenotype.

Auscultation: sinus rhythm; no murmurs; intermittent gallop sound detected.

Screening Exam for Feline Hypertrophic Cardiomyopathy; details: This examination includes subjective evaluation of long and short axis images from the parasternal (intercostal) right-sided acoustic windows. M-mode examination of the LV is also performed. The examination screens for ventricular hypertrophy using 2D long and short axis image planes as well as the standard M-mode images with the cursor placed dorsally to the posterior papillary muscle. Left atrial size is also assessed subjectively and by long-axis maximal diameter. Doppler studies are only performed if needed to evaluate gallop sounds or any murmurs if present.

Echocardiographic Findings

The echocardiographic examination was conducted from both the right and left sides of the thorax. The technical examination was of diagnostic quality and the patient was sufficiently cooperative. A screening echocardiogram was requested and completed with mainly subjective evaluation of the heart to screen for hypertrophic cardiomyopathy.
There is no clear evidence of cardiomyopathy or serious strutural heart disease based on subjective imaging or diastolic measures of the LV walls or septum.
The papillary muscles appear normal.
There is no systolic anterior motion of the MV observed.
LV ejection fraction is normal.
Diastolic function was evaluated by mitral inflow, pulmonary venous flow, and tissue Doppler of LV wall - all were WNL

2D Measurements		
LA Diam	19.8 mm	
LA2D/LVIDd	0.9	(0.8 - 1.1)
LA Diam	19.8 mm	
LA2D/LVIDd	1.0	(0.8 - 1.1)
IVSd-max-Laxis	5.1 mm	
IVSd-max-Sax	4.5 mm	
LVPWd-max-Laxis	4.6 mm	
LVPWd-max-Saxis	5.1 mm	

M-Mode	
LVIDd	19.1 mm
EDV(Teich)	11.4 ml
LVEDND (1.7)	0.036
IVSd	4.9 mm
LVIDd	21.8 mm
LVPWd	5.1 mm
IVSs	8.2 mm
LVIDs	10.1 mm
LVPWs	9.2 mm
EDV(Teich)	15.8 ml
ESV(Teich)	2.1 ml

Doppler Measurements		
MV E Vel	74 cm/s	(60 - 110)
MV DecT	68.8 ms	
MV Dec Slope	10.75 m/s²	
MV A Vel	47.1 cm/s	
MV E/A Ratio	1.57	
Mitral E/Ea-Lateral	8.4	(< 10.0)
TDI-Ea-Lateral	8.9 cm/s	
TDI-Aa-Lateral	3.6 cm/s	
Ea/Aa-Lateral	2.5	

	EF(Teich)	86.8 %	(> 48.0)	
	%FS	53.8 %	(> 25.0)	
	LVPWd/LVIDd	0.23		

Abbreviations: N=normal or WNL=within normal limits; N/E=not evaluated; NSF=no significant findings
EF=ejection fraction; FS=fractional shortening; FAC=fractional area change; TAPSE=tricuspid annular plane systolic excursion
LA=left atrium; LAD=left atrial dilation; LV=left ventricle; LVD=left ventricular dilatation; LVH=left ventricular hypertrophy
RA=rigth atrium; RAD=right atrial dilation; RV=right ventricle; RVE=right ventricular enlargement; RVH=right ventricular hypertrophy
AV=aortic valve; AR=aortic regurgitation; (S)AS=(subvalvular) aortic stenosis,
MV=mitral valve; AMV=anterior mitral leaflet; PMV=posterior mitral leaflet; MR=mitral regurgitation; TV=tricuspid valve; TR=tricuspid regurgitation
PA=pulmonary artery; PHT=pulmonary hypertension; PV=pulmonic valve; PR=pulmonary regurgitation; PS=pulmonic stensosis
ASD=atrial septal defect; VSD=ventricular septal defect; PDA=patent ductus arteriosus
DVD=degenerative (myxomatous) valvular disease; DCM=dilated cardiomyopathy; HCM=hypertrophic cardiomyopathy; PE=pericardial effusion