

Cardiac Ultrasound Exam 09.05.2018

Findings:

Cardiac ultrasound revealed mild central mitral regurgitation with moderate thickening of the valve leaflets, particularly the septal leaflet that appears club shaped, and also mild flail motion of the mitral valve during systole.

There are no signs of cardiac remodeling at this stage with all cardiac chambers presenting normal systolic and diastolic diameters and wall thickness.

The systolic and diastolic functions are both normal and the aortic and pulmonic flow profiles are also normal.

Conclusions:

Chronic degenerative mitral valve disease ACVIM stage B1. This is the most common acquired heart disease in dogs, more prevalent in small breed dogs, and as most chronic pathologies has a tendency for progression over time. At the moment Nemo seems to be compensated, not showing clinical signs of congestive heart failure, and no signs of cardiac remodeling on ultrasound. No medication required at this stage.

Repeat the cardiac ultrasound in 6 months to 1 year to control disease progression.

Useful information:

1. <http://vet.cornell.edu/hospital/Services/Companion/Cardiology/conditions/leaky-valve.cfm>

Patient

BSA m2	Kg
0.247984202	3.9

Parameter	M-Mode	Min.	Max.	Comment.
		95% I.C.		
IVSd	0.62	0.40	0.82	
IVSs	0.78	0.60	1.10	
fract. thick. %	0.26	0.25	0.75	
LVIDd	2.15	1.89	2.76	
LVIDs	1.31	1.09	1.93	
SF%	39	0.30	0.42	
EDV (ml) (Teicholz)	15.29			
EDVI (ml/m2)	61.66		40.00	>100 Diastolic Failure
EDV (Simpson)				
EDVi (Simpson)			<100	
ESV (ml) (Teicholz)	4.24			
ESVI (ml/m2)	17.10	15.00	30.00	40-60 Mild/60-90 Mod/>90 Severe
ESV (Simpson)				
ESVi (Simpson)			<40	
LVWd	0.64	0.40	0.82	
LVWs	0.84	0.65	1.18	
fract. thick. %	0.31	0.25	0.75	
EPSS	0.50	0.50	1.00	
AOd	1.17	1.00	1.53	
PEP (msec)		47.00	61.00	
LVET(msec)		144.00	174.00	
PEP/LVET		0.29	0.39	
LAAs	1.37	0.94	1.55	
LA/AO	1.17	0.94	1.02	0.86/1.57
LA/AO (Modo - M)			<1,3	
FE % (Teicholz)	72.26			>50/40%
FE % (Simpson)				
Lv Lenght				

Sphericity Index	0.00		<1,65 -->	DCM
RVd	0.92			
LV:RV Ratio	0.43			
MPAd	0.92			
MPA:Ao Ratio	0.79		<1,0	
LVIDd/Ao	1.84		<2.0	
HR	100.00			
RR				

Doppler	(m/sec)	low limit	high limit	turbul
Grade				0 to 3+
Pulm. outflow	0.88	0.80	1.50	
Pulm. insuff.				
P.outf. (LcrPs)				
Mitral E-wave	0.67	0.5	1.00	
Mitral A-wave	0.53	0.30	0.60	
E/A-ratio	1.26	1.00	2.00	
Mitral regurg.	5.46			
IVRT (msec)	85.00	25.00	95.00	
AO flow(LAp5ch)	1.14	0.80	1.80	
AO regurg				
AO flow (subcost)		1.20	2.00 ?	
Tric. E-wave	0.48	0.30	0.90	
Tric. A-wave	0.43	0.30	0.60	
E/A-ratio	1.12	1.00	2.00	
Tric. regurg				

119.25 mmHg

0.00 mmHg