



PATIENT

Milana Bender

SPECIES

Canine

BREED

Dachshund

SEX

Female Spayed

AGE

9.8.10

WEIGHT

12.8lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

HOSPITAL NAME

Perry Hall Animal
Hospital

REFERRING VET

Dr. Hatzigiannakis

INVOICE

30431

DATE

4.25.23

PRESENTING CLINICAL SIGNS

History: Recheck echo. Assess prior to anesthesia.

-Pertinent abnormal PE/Chem/CBC/UA Results: 4/18/23: ALT and ALP elevated; BUN mildly elevated. BP Doppler systolic ~150mmHg (was 180 before starting amlodipine). UPC from March and full profile and ACTH from Feb this year will be attached. Most recent curve done 3/24/23; nadir of 97mg/dL about 3 hours post insulin injection. Upper values in 300's about 7-8 hours post insulin

-Current medications: Amlodipine 2.5mg, 1/2 PO SID. Chronic meds: Vetsulin 7.5 units BID, Vetoryl 5mg PO BID, ursodiol 100mg SID, Opth. Flurbiprofen OU SID

-Sedation used: Not required to complete full diagnostic ultrasound.

-Pertinent previous ultrasound results (3/8/222 MML): Trace/mild MR, no LAE, mild TR, mild PAH: 2.8m/s. LA; 1.7, LV: 2.1.

-STAT: Not requested

-Imaging performed by: Andi Parkinson, BS, RDMS.

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. Diffuse thickening of mitral valve leaflets with mild prolapse into the left atrial lumen. Trace/mild eccentric mitral regurgitation with no left atrial dilation. Normal MR velocity. Normal LV diameter with adequate myocardial function. The tricuspid valve appears thickened with septal prolapse and mild tricuspid regurgitation. Velocity consistent with early pulmonary hypertension. Normal right atrial and ventricular diameter and morphology indicating no overt evidence of pulmonary arterial hypertension. The pulmonic and aortic valves are normal in morphology and mobility. Normal pulmonic and aortic outflow velocities with laminar flow. Mild aortic and no pulmonic insufficiency. No pericardial or pleural effusion noted. No obvious cardiac masses.

CARDIAC CHART

CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO (Boon method)	LA/AO (Heart Base; Swe)	FS (%)	EF (%)	EPSS (cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	<1.6	28-40	40-100	<0.6
PATIENT	4.5	2.8	NM	1.3	29	59	NM
CANINE CARDIAC PARAMETERS	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT (kg)	LA 2D short axis Base view (cm)	LVIDd Avg; 2D and m-mode short axis (cm)	LVIDs Avg; 2D and m-mode short axis (cm)
NORMAL PARAMETER	50-100	0.7-1.7	0.7-1.6	BELOW	BELOW	BELOW	BELOW
PATIENT	NM	0.8	0.7	5.8	1.5	2.3	1.6
*Normal chamber parameters expressed as a mean value (SD)				3	1.27 (5.3)	2.46 (2.46)	1.36 (5.5)
BODY WEIGHT DEPENDENT PARAMETERS				5	1.40 (4.5)	2.74 (5.2)	1.60 (4.7)
<i>*Note: All measurements based upon multi-modal images and methods. An average value is reported.</i>				10	1.50 (3.8)	3.27 (3.5)	2.06 (3.1)
				15	1.83 (2.0)	3.71 (2.4)	2.43 (2.1)
				20	2.02 (1.9)	4.14 (2.2)	2.80 (2.0)
				25	2.18 (2.4)	4.48 (2.9)	3.10 (2.5)
				30	2.33 (3.3)	4.83 (3.9)	3.39 (3.4)
				35	2.48 (4.3)	5.17 (5.0)	3.69 (4.5)
				40	2.62 (5.2)	5.48 (6.1)	3.96 (5.4)
				50	2.88 (7.1)	6.07 (8.3)	4.46 (7.4)

Adapted from June Boon, Veterinary Echocardiography, 1998
Rishniw M and Hollis NE, J Vet Intern Med 2000; 14:429-435
Hansson et al, Vet Rad and Ultrasound 2002
Bonagura et al. Echocardiography: principles of interpretation, Vet Clin North Am 15:1177, 1995

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Chronic degenerative valve disease persists with overall stability. Trace/mild mitral and tricuspid regurgitation are unchanged with stable pulmonary pressures. Lack of significant left atrial enlargement indicates the current risk for complication is low. One notable difference is an aortic insufficiency has developed, which may be reflective of recently diagnosed systemic hypertension. No additional issues are noted in this study.

Given these findings, no cardiac medications are clearly indicated. Assessment of progression in the future will help predict long term prognosis, which is highly variable at this stage (B1). Omega fatty acid supplementation and mild salt restriction may be of some long-term benefit. Monitor for development of a cough, labored breathing, exercise intolerance or collapse episodes.

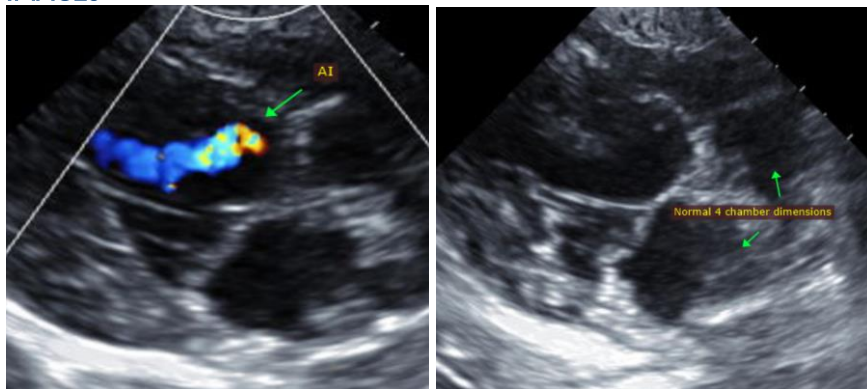
No cardiac contraindication for general anesthesia prior to chamber enlargement.

PLAN

Monitor BP every 6 months once controlled (i.e., <160mmHg).

Recommend conservative monitoring with a recheck echocardiogram in 6-12 months, sooner if any development of clinical signs.

IMAGES



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.

Thank you for this referral. This report was generated using transcription software, and minor dictation errors may be present. 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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