

PATIENT

Lilo Barajas

SPECIES

Canine

BREED

Havanese

SEX

Female Intact

AGE

3.5 years

WEIGHT

6.4lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

IMAGING PERFORMED BY

Loetitia St-Jacques,
LVT/RVT

HOSPITAL NAME

Fairgrounds Animal
Hospital

REFERRING VET

Dr. Johnson

INVOICE

22060

DATE

11/16/21

PRESENTING CLINICAL SIGNS

History: Presented for a spay. On pre-op ECG a supraventricular arrhythmia was noted.

RADIOGRAPHIC FINDINGS *NOTE: Images submitted for supplemental cardiac information only.

Normal cardiac silhouette. No obvious evidence of CHF.

ELECTROCARDIOGRAPHIC FINDINGS

A six lead ECG is available at 50mm/s; 10mm/mV. The underlying rhythm is sinus in origin with an average heart rate of 160bpm (range 125-214bpm). Periods of tachycardia appear sinus in origin. P for every QRS complex and vice versa. The P wave morphology is positive with a normal dimension. Normal PR. The QRS morphology is positive with normal dimension. MEA is normal. A single blocked P wave is identified (see below). No premature beats, pauses or other dysrhythmias observed.

ECG diagnosis: Normal sinus rhythm sympathetic stimulation. A single blocked P wave is identified (2nd degree AV block).

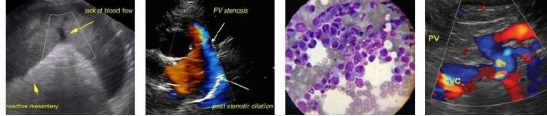
ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. Normal mitral valve leaflets with no prolapse into the left atrial lumen. No mitral regurgitation with no left atrial dilation. Normal LV diameter with adequate myocardial function. The tricuspid valve appears normal with no obvious tricuspid regurgitation. 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. No obvious aortic or 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	NA	NA	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	163	1.4	1.0	2.9	1.3	1.9	1.4
*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)

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



Portable Animal Western Sonography, Inc.

IMAGING PERFORMED BY

pawsonography@gmail.com 530-786-8340

PATIENT

	50	2.88 (7.1)	6.07 (8.3)	4.46 (7.4)
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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Overtly normal cardiac dimensions and function, with no obvious dysfunction or dilation of the left heart. No significant valvular leaks are visualized, and no evidence of pulmonary hypertension. NO congenital abnormalities are appreciated. Suspicion is low in the absence of a heart murmur.

The ECG is largely normal with a significant intermittent tachycardia. What is seen here appears sinus in origin without obvious SVT or APCs. There is a single blocked P wave appreciated, which is somewhat surprising given that the patient appears sympathetically driven. Consider referral for a holter monitor, particularly if additional arrhythmias were noted previously (i.e., supraventricular arrhythmias noted in the history). Anesthesia should ideally be postponed until more information is obtained through history, holter results, etc.

No cardiac medications are indicated.

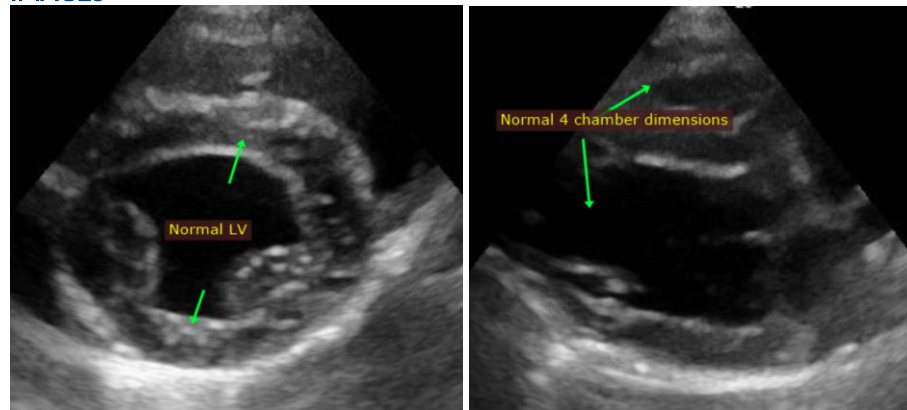
Monitor for development of a heart murmur, cough, labored breathing, exercise intolerance or collapse episodes.

PLAN

Consider further historical information, referral for a holter monitor. If declined, reassess an extended ECG in 3 months to screen for any progressive changes. If unremarkable, reasonable to proceed with OVH at that time.

Recommend recheck echocardiogram should a murmur or clinical signs of cardiac compromise be noted in the future.

IMAGES



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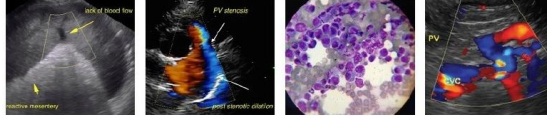
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Maggie Machen Lamy, DVM
Diplomate of the American College of Veterinary Internal Medicine (Cardiology)
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