



PATIENT PRESENTING CLINICAL SIGNS

Sadie Camp History: Found as a stray. Mammary masses. Azotemia. Grade 3/6 heart murmur. Medication: PetTinic, k/d. BP; 110, 107, 89mmHg.

SPECIES RADIOGRAPHIC FINDINGS *NOTE: Images submitted for supplemental cardiac information only.
Mild cardiomegaly. No obvious evidence of CHF.

Canine **ELECTROCARDIOGRAPHIC FINDINGS** *Note: Single lead ECGs are evaluated as a rhythm strip. Morphology/MEA cannot be definitively commented on.

BREED A single lead ECG is available from an AliveCor monitor; 50mm/s, 20mm/mV. The average heart rate is 100bpm (range 55-142bpm). The rhythm is sinus in origin, with a p for every QRS complex and vice versa. The P and QRS are inverted, suggesting atypical device orientation. No ectopic beats, pauses or dysrhythmias observed.

SEX ECG diagnosis: Profound respiratory sinus arrhythmia.

ECHOCARDIOGRAM FINDINGS

Female 2D, m-mode, color flow and doppler imaging is available. Mild diffuse thickening of mitral valve leaflets with no prolapse into the left atrial lumen. Mild central mitral regurgitation with mild left atrial dilation. Normal MR velocity. Normal LV diameter with adequate myocardial function. The tricuspid valve appears normal with trace 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. Trace aortic and pulmonic insufficiency. No pericardial or pleural effusion noted. No obvious cardiac masses.

WEIGHT

10.3lbs

CARDIAC CHART

INTERPRETED BY

Maggie Machen
Lamy, DVM, DACVIM
(Cardiology)

IMAGING PERFORMED BY

Rebekah Jakum, CVT
ARDMS/RVT

HOSPITAL NAME

Pocono Peak VC

REFERRING VET

Dr. Norris

INVOICE

31493

DATE

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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	5.0	NM	NM	1.5	36	68	NM
CANINE CARDIAC PARAMETERS	HR (BP M)	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	70	1.5	0.9	4.7	1.5	2.3	1.5
*Normal chamber parameters expressed as a mean value				3	1.27	2.46	1.36
BODY WEIGHT DEPENDENT PARAMETERS							
<i>*Note: All measurements based upon multi-modal images and methods. An average value is reported.</i>							
Adapted from June Boon, Veterinary Echocardiography, 1998				5	1.40	2.74	1.60
Rishniw M and Hollis NE, J Vet Intern Med 2000; 14:429-435				10	1.50	3.27	2.06
Hansson et al, Vet Rad and Ultrasound 2002				15	1.83	3.71	2.43
Bonagura et al. Echocardiography: principles of interpretation, Vet Clin North Am 15:1177, 1995				20	2.02	4.14	2.80
				25	2.18	4.48	3.10
				30	2.33	4.83	3.39
				35	2.48	5.17	3.69
				40	2.62	5.48	3.96
				50	2.88	6.07	4.46



PATIENT INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Sadie Camp
SPECIES
Canine
BREED
Chihuahua Mix
SEX
Female
AGE
14 years

Chronic degenerative valve disease causing mild mitral and trace tricuspid regurgitation. Lack of left atrial enlargement indicates the current risk for complication is low. Mild aortic insufficiency is noted; however, the reported BP is low. This is unexpected for a stressed dog in hospital with reported azotemia. Reassessment is recommended to ensure no hypertension is present. No additional issues are identified.

The ECG shows a relatively low resting heart rate with respiratory variation. This is likely due to high vagal tone; however, Atropine should be administered as a pre-medication to ensure a normal response. No additional issues are identified.

In a dog with no significant left atrial enlargement, no cardiac medications are clearly indicated. 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.

Anesthetic risk is considered mild. Premedicated with a vagolytic. Cardiac protective drug choices (opioid/benzodiazepine premedication, propofol or alfaxalone induction, isoflurane gas) are recommended. Pre-oxygenate for 5-10 minutes prior to induction. Monitor for arrhythmias, hypotension, and hypoxia both intra and post-operatively and intervene as necessary. Mild IV fluid restriction is recommended to avoid fluid overload.

PLAN

WEIGHT Reassess BP as discussed.

10.3lbs Recommend conservative monitoring with a recheck echocardiogram in 6 months, sooner if any development of clinical signs.

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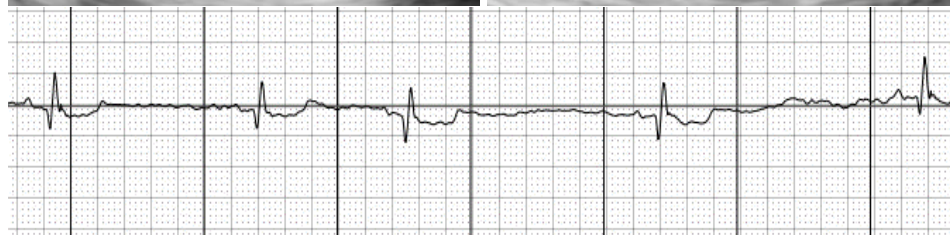
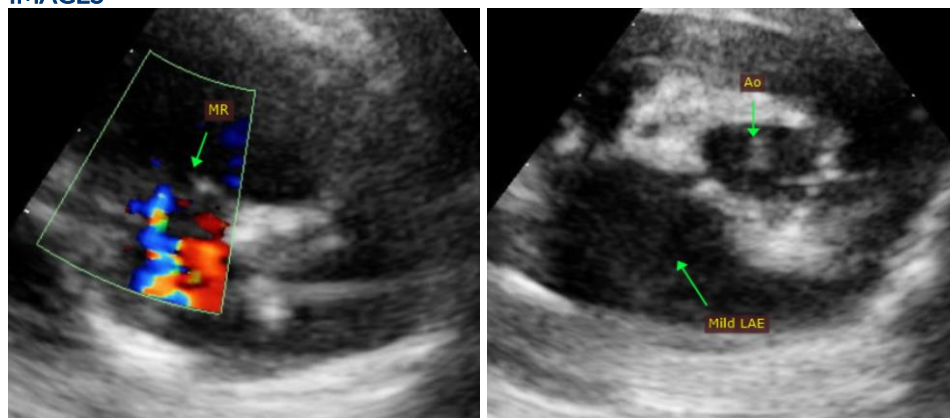
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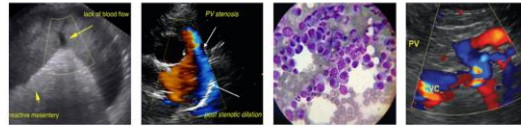
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IMAGES





PATIENT

Sadie Camp

SPECIES

Canine

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.

BREED

Chihuahua Mix

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.

SEX

Female

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

14 years

WEIGHT

10.3lbs

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