


PATIENT

Hanna Adshead

SPECIES

Canine

BREED

CKCS

SEX

Female Spayed

AGE

12 years

PRESENTING CLINICAL SIGNS

History: During recent anesthetic for dental and lump removal -Hanna's mucus membrane color was slightly dark before getting sedation. No heart murmur was audible but had been noted previously in her history. Her sPO2 was mid 90's without oxygen, then high 90's with masked oxygen supplementation before sedation. She was given her premed (hydromorphone 0.15 mg/kg, acepromazine 0.02 mg/kg, and atropine 0.02 mg/kg) and it provided a good sedation. Her color was still not very pink until she had been on masked oxygen for a few minutes. During this time her heart rate varied but tended to be between 140 and 155. Initially her blood pressure was very high (over 200) but came down and ended up around 120 with some fluctuations up as high as 164. ECG appeared regular throughout, normal complexes. sPO2 stayed in high 90's during this time while receiving O2 by mask. Owner was consulted about further investigation as to her cardiac function and agreed to x rays. The radiographs showed her heart to have a VHS score of about 10.65, considered normal for CKC spaniel, but it does appear rounded, esp right side. Also, her liver is quite large and may compromise lung expansion. During radiographs she twice had short seizure-like muscle spasm episodes lasting less than 5 seconds long. Hanna was given Torbugesic to reverse the Hydromorphone. Hanna was given supplemental oxygen for over an hour. She was still a bit wobbly at that point but maintaining her pinkish color. 10/10/19 - Cardiac- grade 2-3/6 systolic heart murmur with PMI left side noted in medical history.

WEIGHT

22.3lbs

INTERPRETED BY

 Maggie Machen Lamy,
 DVM DACVIM
 (Cardiology)

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. Mild diffuse thickening of mitral valve leaflets with mild prolapse into the left atrial lumen. Trace/mild central mitral regurgitation with no left atrial dilation. Normal MR velocity. Normal LV diameter with adequate myocardial function. The tricuspid valve appears mildly thickened with mild tricuspid regurgitation. Normal velocity. 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.

IMAGING PERFORMED BY

Crystal Hill, RVT

CARDIAC CHART
HOSPITAL NAME

 Chippawa Animal
 Hospital

REFERRING VET

Dr. Van Leeuwen

INVOICE

22015

DATE

11/11/21

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	5.2	2.5	1.3	1.2	37	69	0.3
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	1.5	0.86	10.10	1.6	3.3	2.0
*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)
*Note: All measurements based upon multi-modal images and methods. An average value is reported.				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)



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(Cardiology)

Adapted from June Boon, Veterinary Echocardiography, 1998	20	2.02 (1.9)	4.14 (2.2)	2.80 (2.0)
Rishniw M and Hollis NE, J Vet Intern Med 2000; 14:429-435	25	2.18 (2.4)	4.48 (2.9)	3.10 (2.5)
Hansson et al, Vet Rad and Ultrasound 2002	30	2.33 (3.3)	4.83 (3.9)	3.39 (3.4)
Bonagura et al. Echocardiography: principles of interpretation, Vet Clin North Am 15:1177, 1995	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)

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Chronic degenerative valve disease causing mild mitral and mild tricuspid regurgitation. Lack of significant left atrial enlargement indicates the current risk for complication is low. A small aortic leak is noted, and a baseline blood pressure is strongly recommended. No concurrent issues such as systolic dysfunction or pulmonary hypertension are noted in this study.

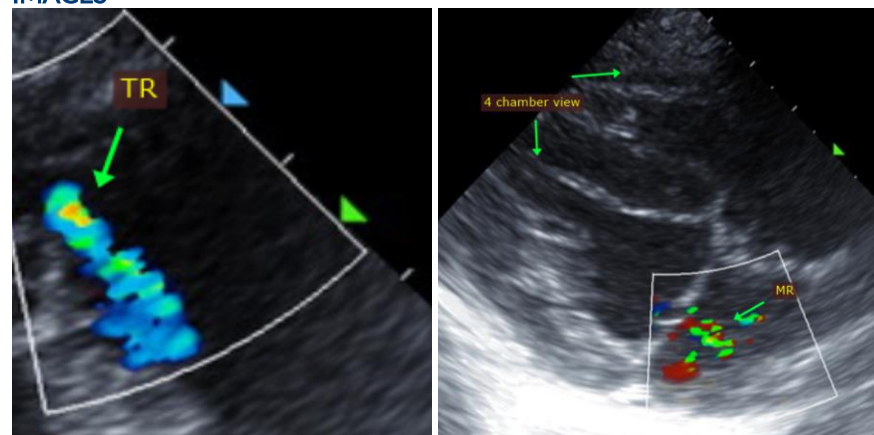
Even with mild CVD, this does not explain anesthetic complications or inappropriate oxygenation (unexpected from a cardiac standpoint). Consider primary respiratory or systemic issues prior to proceeding.

In a dog with no significant left atrial enlargement, 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. 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.

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

IMAGES



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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.

SPECIES

Canine

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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CKCS

Maggie Machen Lamy, DVM
Diplomate of the American College of Veterinary Internal Medicine (Cardiology)
info@sonopath.com

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