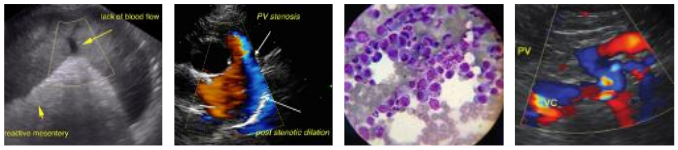
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT
Abel Storm

SPECIES
Canine

BREED
Lab

SEX
Male Neutered

AGE
2 years

WEIGHT
74lbs

INTERPRETED BY
Maggie Machen Lamy, DVM, DACVIM (Cardiology)

IMAGING PERFORMED BY
Lindsey Daniel, DVM

HOSPITAL NAME
Village Veterinary Clinic

REFERRING VET
Dr. Kuykendall

INVOICE
20716

DATE
8/24/21

PRESENTING CLINICAL SIGNS

History: Recheck echo. Previous diagnosis SVT and CHF. Doing much better.
-Current medications: Pimobendan 10mg AM, 7.5mg PM, Sotalol 80mg 1/2 t BID, Lasix 80mg BID, Spironolactone 50mg BID.
-Pertinent previous echo findings (8/10/21 MML): Rapid SVT, heart rate: 300bpm, FS: 13%, LV: 6.1, 5.3, LA: 4.0, LA/AO: 1.75; ascites noted.

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 obvious mitral regurgitation with a normal left atrial dimension. Normal LV diameter with adequate myocardial function. The tricuspid valve appears normal with no 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.

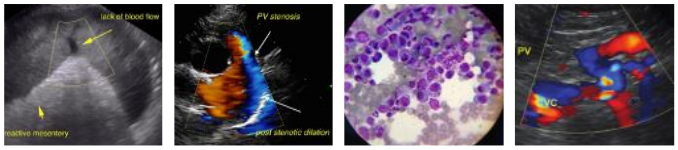
CARDIAC CHART

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	1.2	30 58		1.2
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	53-73	NM	0.6	33.6	2.7	4.6	3.2
*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)
				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

Dramatic improvement in cardiac dimensions and function with overall normal findings. The systolic function appears intact, and the left heart dilation has resolved. This would suggest the primary issue in this case was the arrythmias as suspected with secondary cardiac changes.



SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT
Abel Storm

SPECIES
Canine

BREED
Lab

SEX
Male Neutered

AGE
2 years

WEIGHT
74lbs

INTERPRETED BY
Maggie Machen Lamy, DVM, DACVIM (Cardiology)

IMAGING PERFORMED BY
Lindsey Daniel, DVM

HOSPITAL NAME
Village Veterinary Clinic

REFERRING VET
Dr. Kuykendall

INVOICE
20716

DATE
8/24/21

Bradycardia is noted throughout, and a reassessment of the ECG is recommended. While ideally the heart rate would be slightly increased, if the patient is doing well at home (i.e., not lethargic), I would continue the dose as prescribed for the time being. Additionally, we may be able to discontinue cardiac supportive medications in the future; however, for the short-term I would continue all medications as prescribed.

Consideration of ablation therapy should still be discussed as was previously recommended. If declined, this patient will likely be on antiarrhythmic medications lifelong; however, many animals can do quite well with this approach.

Patient will always be at risk for breakthrough arrhythmias, syncope and/or sudden death in the future.

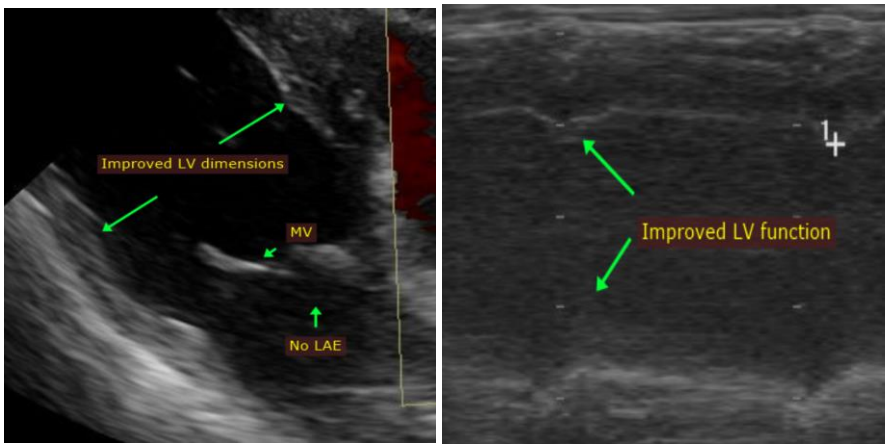
Prognosis is guarded long-term. Omega fatty acid supplementation and mild salt restriction may be of some long-term benefit. Monitor for development of a cough, labored breathing, exercise intolerance or collapse episodes.

PLAN

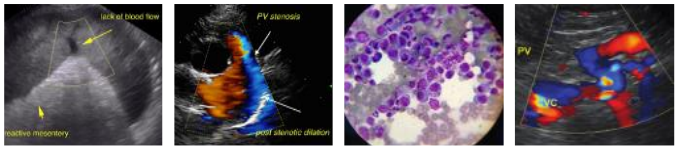
Continue Pimobendan, Sotalol, Lasix and Spironolactone as prescribed. Baseline ECG is recommended every 6 months.

Recommend conservative monitoring with a recheck echocardiogram and ECG in 6 months to determine if cardiac supportive medications need to be continued, sooner if any development of clinical signs.

IMAGES



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT
Abel Storm

SPECIES
Canine

BREED
Lab

SEX
Male Neutered

AGE
2 years

WEIGHT
74lbs

INTERPRETED BY
Maggie Machen Lamy, DVM, DACVIM (Cardiology)

IMAGING PERFORMED BY
Lindsey Daniel, DVM

HOSPITAL NAME
Village Veterinary Clinic

REFERRING VET
Dr. Kuykendall

INVOICE
20716

DATE
8/24/21

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)
info@sonopath.com