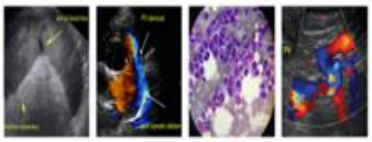
Mass Veterinary Services



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com

PATIENT
Chessa Medore

SPECIES
Canine

BREED
Bichon Frise

SEX
Female Spayed

AGE
12 years

WEIGHT
9.44lbs

INTERPRETED BY
Maggie Machen Lamy, DVM DACVIM (Cardiology)

IMAGING PERFORMED BY
Pamela Harrigan, RDCS

HOSPITAL NAME
Mass Veterinary Services

REFERRING VET
Dr. Masloski

INVOICE
24801

DATE
6/15/22

PRESENTING CLINICAL SIGNS

History: Chessa was noted to have a heart murmur in July 2018. Presented to ER for dyspnea earlier this month and was hospitalized on oxygen therapy for congestive heart failure. Radiographs revealed cardiomegaly with a patchy interstitial to alveolar lung pattern. Started on Lasix and Pimobendan with improvement in signs although developed PU/PD. Good appetite. The family has been restricting her activity a bit. On exam today: NSR, grade IV/VI murmur with PMI left apical area radiating to right, PSS, lung fields clear. BP: 240mmHg. Current medications: 1) Pimobendan/vetmedin 1.25mg 1 tab twice a day 2) Lasix/furosemide 12.5mg 3/4 tab twice a day *No sedation for study.

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and Doppler imaging is available.
Left ventricle: The LV diameter is increased with hyperdynamic myocardial function. Evidence of significant volume overload. LV wall thicknesses are normal.
Left atrium: The left atrium is severely dilated.
Mitral valve: The mitral valve is diffusely thickened with significant prolapse into the left atrial lumen. Severe eccentric mitral regurgitation with normal velocity.
Aortic valve/Aorta: The aortic valve appears normal. Normal aortic outflow velocity; laminar flow. No aortic insufficiency.
Right ventricle: The right ventricle is mildly dilated with minimal hypertrophy.
Right atrium: Mild RA dilation.
Tricuspid valve: The tricuspid valve appears mildly thickened with mild tricuspid regurgitation; velocity consistent with severe pulmonary arterial hypertension.
Pulmonic valve/Pulmonary artery: The pulmonic valve is normal in morphology and mobility. No pulmonic insufficiency. Normal RVOT velocity; laminar flow. The MPA and branches are mildly dilated.
Pericardium/other: No pericardial effusion noted. No pleural effusion. No obvious cardiac masses.
Heart rhythm: ECG reveals a sinus rhythm with an average HR of 140bpm.

2-Dimensional Measurements

Ao diam (cm)	1.3
LA diam (cm)	2.8
LA:Ao (Swe)	2.2
IVS thickness (cm)	0.6
LVID diastole (cm)	3.0
PW thickness (cm)	0.6
LVID systole (cm)	1.2
FS (%)	60

Doppler Measurements

PV Vmax (m/s)	0.72
AoV Vmax (m/s)	1.1
MR Vmax (m/s)	5.6
TR Vmax (m/s)	4.5
TR PG (mmHg)	85

INTERPRETATION OF THE FINDINGS

Chronic degenerative valve disease causing severe mitral and mild tricuspid regurgitation. Significant 4 chamber dilation indicates the risk for congestive heart failure is elevated. The TR velocity suggests severe pulmonary hypertension; however, this is thought to be a mild over-estimation with only mild right heart enlargement and mild TR. Regardless, this should be monitored going forward and may put the patient at risk for right-sided congestion, and/or syncope.

Mass Veterinary Services

SonoPath Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com

PATIENT
Chessa Medore

SPECIES
Canine

BREED
Bichon Frise

SEX
Female Spayed

AGE
12 years

WEIGHT
9.44lbs

INTERPRETED BY
Maggie Machen Lamy, DVM DACVIM (Cardiology)

IMAGING PERFORMED BY
Pamela Harrigan, RDCS

HOSPITAL NAME
Mass Veterinary Services

REFERRING VET
Dr. Masloski

INVOICE
24801

DATE
6/15/22

Given the history and severity of disease seen here, full life-long cardiac medications are recommended as below as the prior diagnosis of CHF is supported. Sildenafil is not yet recommended as the patient is doing well without any clinical symptoms.

The prognosis is poor long term, with a predicted survival time of <6 months. Patient will always be at high risk for recurrent biventricular CHF, LA tear, progressive cough and/or malignant arrhythmias/sudden death in the future.

The reported blood pressure is elevated and should be reassessed for accuracy particularly given no reported clinical signs of severe hypertension (retinal changes, etc.) or evidence of LVH on echo. Ideally obtain serial measurements in a controlled, low stress environment and continue until 3 consecutive readings plateau within 5mmHg of variability. If persistently >180mmHg despite a relatively calm demeanor, recommend institution of amlodipine to effect. Additionally, if deemed accurate, screening for predisposing underlying causes of SHT is recommended (Cushings, PLN, adrenal tumor, etc.), as primary disease is relatively uncommon and a rule out diagnosis.

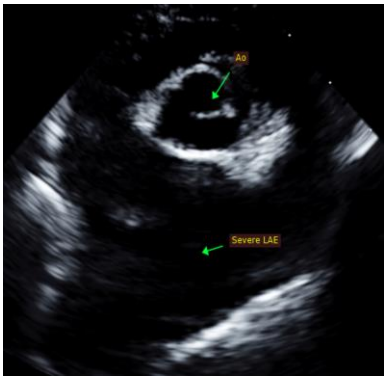
RECOMMENDATIONS

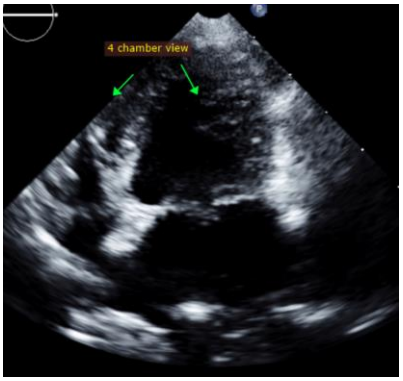
- Continue Lasix and Pimobendan as prescribed.
- Institute Spironolactone 1-2mg/kg PO q12h.
- Institute ACE-I 0.5mg/kg PO q12h.
- Utilize Hydrocodone if needed for quality of life.
- Omega fatty acid supplementation and mild salt restriction may be of some long-term benefit.
- Elective anesthesia is not advised.
- Monitor for development of a cough, labored breathing, exercise intolerance or collapse episodes.

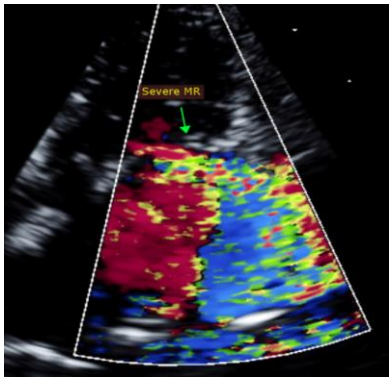
PLAN

- Recheck renal values and BP in 1-2 weeks, then every 3-4 months lifelong.
- Recommend conservative monitoring with a recheck echocardiogram in 6 months, sooner if any development of clinical signs.

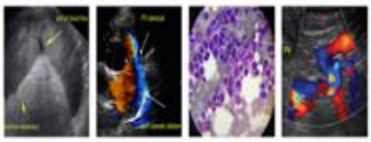
IMAGES







Mass Veterinary Services



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com

PATIENT
Chessa Medore

SPECIES
Canine

BREED
Bichon Frise

SEX
Female Spayed

AGE
12 years

WEIGHT
9.44lbs

INTERPRETED BY
Maggie Machen Lamy, DVM DACVIM (Cardiology)

IMAGING PERFORMED BY
Pamela Harrigan, RDCS

HOSPITAL NAME
Mass Veterinary Services

REFERRING VET
Dr. Masloski

INVOICE
24801

DATE
6/15/22

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

Echocardiogram performed by: Pamela Harrigan, RDCS
Pet Animal Ultrasound Service (4paus.com)