



PATIENT

Ava St. Germain

SPECIES

Canine

BREED

Chihuahua

SEX

Female Spayed

AGE

8 years

WEIGHT

4.99lbs

INTERPRETED BY

Maggie Machen Lamy, DVM DACVIM (Cardiology)

IMAGING PERFORMED BY

Pamela Harrigan, RDCS

HOSPITAL NAME

Mass Veterinary Services

REFERRING VET

Dr. Masloski

INVOICE

25992

DATE

8/24/22

PRESENTING CLINICAL SIGNS

History: Ava was noted to have a heart murmur in May 2020. Radiographs in July revealed cardiomegaly with mainstem bronchus compression. She was started on pimobendan and Lasix. She has been coughing a great deal especially when excited but also when lying down. Her appetite has been waxing and waning recently. Her activity is also on and off. Ava has developed some diarrhea since starting the Lasix and pimobendan that has not improved with the Pimobendan being decreased to the current dose. On exam: NSR, grade IV/VI murmur with PMI left apical area radiating to right, PSS, lung fields clear. BP: 120mmHg x 4. Current medications: 1) Pimobendan/vetmedin 1.25mg 1/2 tab am with 1/4 tab pm 2) Lasix/furosemide 1/4 tab twice a day *No sedation for study.

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and Doppler imaging is available. **Left ventricle:** Moderate LV dilation with hyperdynamic function. LV wall thicknesses are normal. **Left atrium:** The left atrium is severely enlarged and bulbous in appearance. **Mitral valve:** Diffuse thickening of mitral valve leaflets (anterior> posterior) with prolapse into the left atrial lumen. Severe mitral regurgitation. Normal velocity. **Aortic valve/Aorta:** The aortic valve is normal in morphology and mobility. No AI. Normal LVOT velocity. **Right ventricle:** Normal RV dimension. No obvious RVH. **Right atrium:** Mild atrial dilation. **Tricuspid valve:** The tricuspid valve appears thickened with minimal septal prolapse. Mild tricuspid regurgitation visualized. Velocity consistent with mild pulmonary hypertension. **Pulmonic valve/Pulmonary artery:** The pulmonic valve is normal with normal pulmonic outflow velocity. No pulmonic insufficiency. **Pericardium/other:** No pericardial or pleural effusion noted. No obvious cardiac masses. **Heart rhythm:** ECG reveals a sinus rhythm with an average HR of 190bpm.

2-Dimensional Measurements

Ao diam (cm)	1.0
LA diam (cm)	2.7
LA:Ao (Swe)	2.7
IVS thickness (cm)	0.44
LVID diastole (cm)	3.0
PW thickness (cm)	0.43
LVID systole (cm)	1.6
FS (%)	47

Doppler Measurements

PV Vmax (m/s)	0.74
AoV Vmax (m/s)	1.0
MR Vmax (m/s)	5.5
TR Vmax (m/s)	3.2
TR PG (mmHg)	40

INTERPRETATION OF THE FINDINGS

Chronic degenerative valve disease causing severe mitral and mild tricuspid regurgitation. Severe LA dilation indicates the risk for spontaneous congestive heart failure is high going forward. Early pulmonary hypertension is noted which should be monitored going forward. No additional issues such as systolic dysfunction is identified.

In light of a reported cough and severity of disease on echocardiogram, there is concern for early congestive heart failure even without reported congestion on films. Continued full cardiac supportive medications are recommended as below, including Lasix therapy.



PATIENT
Ava St. Germain

Hydrocodone should also be continued for any mechanical or respiratory component. Consider further respiratory evaluation if the cough persists.

SPECIES
Canine

The average survival time of canine patients with active pulmonary edema is 8-9 months on medications, however they generally are able to maintain a good quality of life for that period. Patient will always be at risk for recurrent CHF, development of arrhythmias/LA tear, syncope and/or sudden death in the future.

BREED
Chihuahua

RECOMMENDATIONS

- Administer Furosemide 1mg/kg PO q12h.
- Administer Pimobendan 0.3mg/kg PO q12h.
- Institute Spironolactone 1-2mg/kg PO q12h.
- Pending response, consider hydrocodone with homatropine 0.2-0.4mg/kg up to q4-6 hours PRN for any residual mechanical cough in the face of normal sleeping respiratory rates.
- Monitor for development of a cough, labored breathing, exercise intolerance or collapse episodes.
- Monitoring of sleeping respiratory rates will be paramount to screen for congestive heart failure at home.
- Elective anesthesia is not advised.
- Omega fatty acid supplementation and mild salt restriction may be of some long-term benefit.

SEX
Female Spayed

AGE
8 years

WEIGHT
4.99lbs

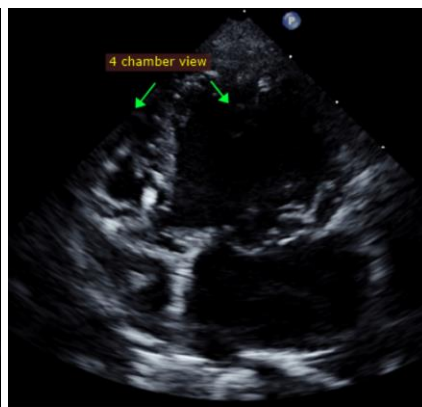
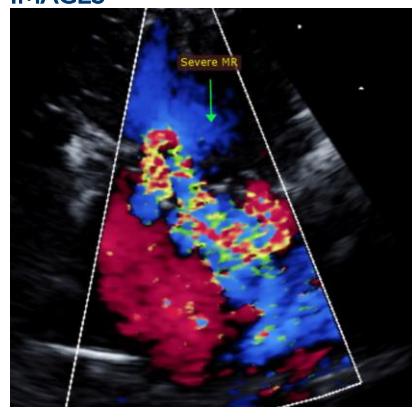
INTERPRETED BY
Maggie Machen
Lamy, DVM
DACVIM (Cardiology)

PLAN

- Monitor renal values and BP in 1-2 weeks. If BP >130mmHg, institute ACEI 0.5mg/kg PO q12h. Monitor renal panel/BP every 3-4 months lifelong.
- Recommend conservative monitoring with a recheck echocardiogram in 4-6 months, sooner if any development of clinical signs.

IMAGES

IMAGING PERFORMED BY
Pamela Harrigan,
RDCS



HOSPITAL NAME
Mass Veterinary Services

REFERRING VET
Dr. Masloski

INVOICE
25992

DATE
8/24/22



Mass Veterinary
Services



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

PATIENT

Ava St. Germain

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.

BREED

Chihuahua

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

SEX

Female Spayed

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

AGE

8 years

WEIGHT

4.99lbs

INTERPRETED BY

Maggie Machen
Lamy, DVM
DACVIM (Cardiology)

**IMAGING
PERFORMED BY**

Pamela Harrigan,
RDCS

HOSPITAL NAME

Mass Veterinary
Services

REFERRING VET

Dr. Masloski

INVOICE

25992

DATE

8/24/22