



PATIENT

Sadie Brunner

SPECIES

Canine

BREED

Yorkie X

SEX

Spayed Female

AGE

6 Years

WEIGHT

5.6 Pounds

PRESENTING CLINICAL SIGNS

Newly acquired murmur 3-4/6. Had SX in April and no murmur was heard. Currently on Gabapentin 25mg SID, Cerenia 8mg EOD, Galliprant PRN for limping. VHS 8.9
Abnormal PE/Chem/CBC/UA Results: Last BW WNL; Urine has 2+ Protein, UPC 0.4

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO (Boon method)	LA/AO Long axis "free hand"	FS (%)	EF (%)	EPSS (cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	<1.6	28-40	40-100	<0.6
PATIENT	NM		1.12	1.26	28	NM	0.12
CANINE CARDIAC PARAMETERS	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT kg	LA 2D long 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				
PATIENT	NM	0.62	NM	2.54 kg	NM	2.28	1.78

Adapted from June Boon, Veterinary Echocardiography, 1998
Sisson D et al. JVIM 1991; 5: 232, and Jacobs et al. Am J Vet Res 1985; 46:1705

INTERPRETED BY

Lisa Carioto, DVM,
DVSc, Diplomate
ACVIM

IMAGING PERFORMED BY

Tasha

HOSPITAL NAME

Dillsburg Vet Clinic

REFERRING VET

Dr. Crow

INVOICE

38896

DATE

6/20/22

Echocardiographic findings

Acepromazine administered to perform the echocardiogram

Mitral valve

- Mild to moderate myxomatous degeneration of both leaflets. The septal leaflet is more severely affected compared to the posterior leaflet.
- Mild prolapse of both leaflets. The septal leaflet is more severely affected compared to the posterior leaflet.
- Mitral regurgitation.
- Mild left atrial enlargement
- LA: Ao ratio: within normal limits (WNL)
- LVIDd normalized for BW (LVIDND = 1.74); very mildly increased
- LVIDs normalized for BW (LVIDNS = 1.33); mildly increased

Aortic valve

- No abnormalities

Tricuspid valve

- Trivial myxomatous degeneration of the tricuspid valve (septal)



PATIENT

Sadie Brunner

- No prolapse of posterior leaflet.
- Tricuspid regurgitation: Not evaluated
- No right ventricular or atrial enlargement.

SPECIES

Canine

Pulmonic valve

- No abnormalities

BREED

Yorkie X

Other

- Main pulmonary artery: no obvious abnormalities
- No signs of pericardial or pleural effusion
- No evidence of pulmonary edema.
- No obvious signs of a mass.
- Endocardium and myocardium: no obvious abnormalities

SEX

Spayed Female

AGE

6 Years

ULTRASONOGRAPHIC FINDINGS

WEIGHT

5.6 Pounds

- Myxomatous degeneration of the mitral (moderate) and tricuspid (trivial) valves, ACVIM stage B2, with mild left atrial enlargement and mild left ventricular enlargement, with systolic dysfunction.
- Sadie's disease has progressed since 2020. Treatment with pimobendan (Vetmedin) is recommended due to the progression of her heart disease and the fact that today's results meet the criteria to initiate medication as per the EPIC study. The administration of pimobendan will help slow the progression of Sadie's heart disease.
- There are no signs of congestive heart failure.

INTERPRETED BY

Lisa Carioto, DVM,
DVSc, Diplomate
ACVIM

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

IMAGING PERFORMED BY

Tasha

Treatment with pimobendan is recommended (see below).

HOSPITAL NAME

Dillsburg Vet Clinic

Other suggestions/recommendations include:

- Evaluation of arterial blood pressure
- Baseline blood work, including a SDMA
- Treatment with pimobendan at 0.25-0.30 mg/kg PO every 12 hours. If sensitive GI system, the dose should be started at 0.10 mg/kg PO every 12 hours for 3 days prior to increasing to the full dose. Administer with a small amount of food to decrease nausea.

REFERRING VET

Dr. Crow

INVOICE

38896

- Monitoring of the resting (sleeping) respiratory rate (RRR) is highly recommended once a day. The RRR should NOT EXCEED 30 breaths per minute (bpm). If the respiratory rate is greater than 30 bpm, or if there is a gradual increase (over a day or two) toward 30 bpm, the patient should be evaluated immediately for congestive heart failure and the appropriate treatment initiated.

DATE

6/20/22



PATIENT

Sadie Brunner

SPECIES

Canine

BREED

Yorkie X

SEX

Spayed Female

AGE

6 Years

WEIGHT

5.6 Pounds

INTERPRETED BY

Lisa Carioto, DVM,
DVSc, Diplomate
ACVIM

**IMAGING
PERFORMED BY**

Tasha

HOSPITAL NAME

Dillsburg Vet Clinic

REFERRING VET

Dr. Crow

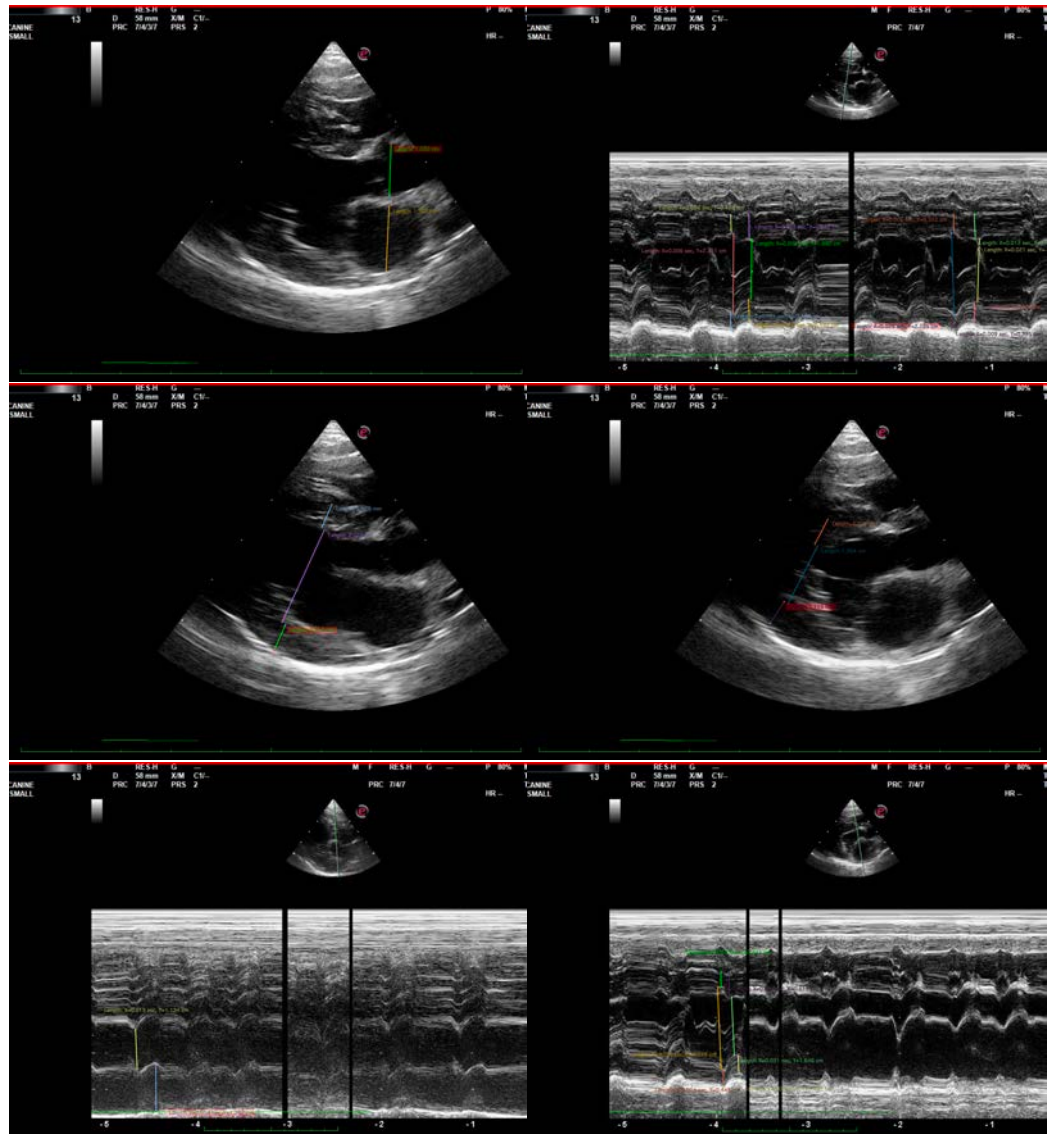
INVOICE

38896

DATE

6/20/22

- Other clinical signs clients should monitor for include coughing (particularly at night), fatigue, lethargy, decreased exercise tolerance (i.e., not being able to walk for as long before becoming tired, or “running out of breath” while playing, or going up and down stairs, as well as syncope (collapsing or fainting spells). Restlessness, or agitation during the night, or being unable to find a comfortable position to sleep are also very common clinical signs.
- Mild salt restriction is suggested (less than 0.9 grams/1000 kcal of food), and ideally between 0.4-0.5 grams/1000 kcal of food). Monitor salt content in treats.
- Omega-3 fatty acids may be helpful (EPA = 40 mg/kg/day and DHA = 25 mg/kg/day); gradual up-titration of the dose is suggested to decrease risk of gastrointestinal effects. However, they should not be introduced at the same time as pimobendan.
- Monitoring for progression of heart disease with a re-evaluation of an echocardiogram every 6 to 8 months, or sooner if clinical signs develop, is recommended.





PATIENT

Sadie Brunner

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

SPECIES

Canine

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.

Eric Lindquist, DMV, DABVP, Cert. IVUSS, CEO of SonoPath.com

info@SonoPath.com

BREED

Yorkie X

SEX

Spayed Female

AGE

6 Years

WEIGHT

5.6 Pounds

INTERPRETED BY

Lisa Carioto, DVM,
DVSc, Diplomate
ACVIM

**IMAGING
PERFORMED BY**

Tasha

HOSPITAL NAME

Dillsburg Vet Clinic

REFERRING VET

Dr. Crow

INVOICE

38896

DATE

6/20/22