

PATIENT

Duke Epperson

SPECIES

Canine

BREED

Pomeranian

SEX

Neutered Male

AGE

5/12/17

WEIGHT

8.62 kg

INTERPRETED BY

James Wood, DVM,
DACVIM (Cardiology)

IMAGING PERFORMED BY

Loetitia Saint-Jacques,
LVT, RVT

HOSPITAL NAME

Pinion Veterinary
Hospital

REFERRING VET

Dr. Jennifer Jackson

INVOICE

37307

DATE

6/3/26

PRESENTING CLINICAL SIGNS

History: New heart murmur- Coughing 4-5x a day since puppy. Hack. 3/6 murmur. No meds- Butorphanol sedation.

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

CANINE CARDIAC PARAMETERS	LA long axis	LAmxN	Ao long axis	LA/AO (Heart Base; Swe, short axis)	LA/AO long axis	LVIDd	LVIDdN
NORMAL PARAMETER		<1.57		<1.6	<2.5		<1.7
PATIENT	2.59	1.33	0.92	1.35	2.82	2.9	1.47
CARDIAC PARAMETERS	Body Weight (kg)	AV VMAX (m/s)	PV MAX (m/s)	MR VMAX (m/s)	TR VMAX (m/s)	FS (%)	LVIDsN
NORMAL PARAMETER		0.7-1.7	0.7-1.6			22 - 49%	<0.9
PATIENT	8.62	1.25	0.7	5.97	3.18	55.2	0.56
CARDIAC PARAMETERS	HR (bpm)	MV E (m/s)	MV A (m/s)	MV E/A (m/s)	EF (%)	IVSdN	LVFWdN
NORMAL PARAMETER						<0.6	<0.6
PATIENT	60	0.93	0.69	1.35	--	0.49	0.41

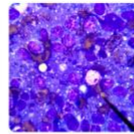
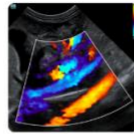
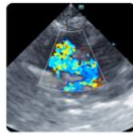
Radiographic Interpretation

A single lateral thoracic radiograph is available for review. On the radiograph, there is subjectively mild left atrial enlargement. The visible pulmonary vasculature is within normal limits. There is a mild diffuse bronchointerstitial pulmonary pattern.

ECG Interpretation

A 6-lead ECG is reviewed. There is an underlying sinus arrhythmia with an average heart rate of 60bpm. Complex measurements are normal. There is no supraventricular or ventricular ectopy or AV block noted.

Cardiac Presentation



PATIENT

Duke Epperson

SPECIES

Canine

BREED

Pomeranian

SEX

Neutered Male

AGE

5/12/17

WEIGHT

8.62 kg

INTERPRETED BY

James Wood, DVM,
DACVIM (Cardiology)

**IMAGING
PERFORMED BY**

Loetitia Saint-Jacques,
LVT, RVT

HOSPITAL NAME

Pinion Veterinary
Hospital

REFERRING VET

Dr. Jennifer Jackson

INVOICE

37307

DATE

6/3/26

The mitral valve leaflets are moderately thickened with mild eccentric and posteriorly directed mitral valve insufficiency. There is mild prolapse of the mitral valve leaflets. The left atrial size is 3normal. Left ventricular internal dimensions during diastole are within normal limits and the global left 4ventricular systolic function is normal. There is normal right atrial size with mild tricuspid regurgitation. There is mild thickening and mild prolapse of the tricuspid valve leaflets and evidence of a mildly increased RV systolic pressure based on the tricuspid regurgitant velocity. The right ventricle subjectively appears normal in structure and function. The aortic and pulmonary valves have normal appearance and motion, and the corresponding outflow velocities are within normal limits. There is no evidence of pulmonary or aortic valve insufficiency. The aorta appears normal. The pulmonary artery and associated branches appear normal. There is no evidence of pleural effusion, pericardial effusion, or intracardiac masses.

ULTRASONOGRAPHIC FINDINGS

- MMVD- ACVIM stage B1
- Mild pulmonary hypertension

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The echocardiogram showed evidence of myxomatous mitral valve disease. Based on this echocardiogram, the left atrial and left ventricular chamber sizes do not meet the criteria for the initiation of pimobendan. No medications are recommended at this time. The overall risk of adverse cardiovascular outcomes is considered very low in the near future. This is, however, a progressive disease, and as such repeat echocardiogram in ~9-12 months is recommended to screen for progression. Recheck sooner if there is a new cough, increase in the resting RR, or other concern for progressive cardiac disease. Recheck for an echocardiogram in 9-12 months or sooner if concerns arise.

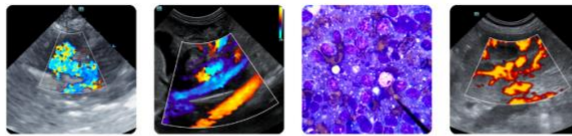
Given the lack of significant left-sided chamber remodeling and the provided thoracic radiographs, congestive heart failure is not the suspected cause of the cough.

It is very important to catch any clinical signs concerning for emerging CHF as early as possible. The client should be closely monitoring and ideally tracking the sleeping respiratory rate. The sleeping RR should be between 10-30 breaths per minute or less (ideally in the teens or low 20s). **If the resting RR is trending upward**, consistently >35/min while resting/sleeping AND/OR there is a new or progressive cough, the patient should be seen urgent for evaluation to determine if CHF is developing. *RECHECK ASAP for thoracic radiographs if there is a new cough or increase in RR to detect early CHF and avoid ER presentation**

Imaging performed by



Portland Animal Wellness Sonography, Inc.
pawsonography@gmail.com
530-786-8340



Clinical Sonography & Telectology
Educational Teleconsultation Services™

SonoPath

FOSTERING THE ART OF VETERINARY MEDICINE™

SonoPath.com info@sonopath.com 1.800.838.4268

PATIENT

Duke Epperson

SPECIES

Canine

BREED

Pomeranian

SEX

Neutered Male

AGE

5/12/17

WEIGHT

8.62 kg

INTERPRETED BY

James Wood, DVM,
DACVIM (Cardiology)

IMAGING PERFORMED BY

Loetitia Saint-Jacques,
LVT, RVT

HOSPITAL NAME

Pinion Veterinary
Hospital

REFERRING VET

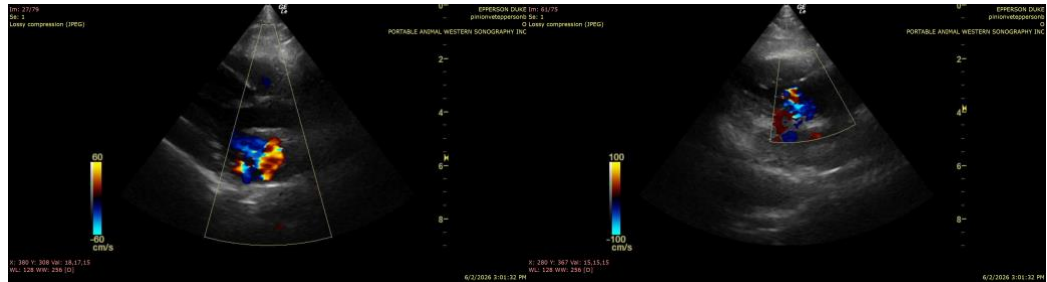
Dr. Jennifer Jackson

INVOICE

37307

DATE

6/3/26



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.

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.

James Wood, DVM, DACVIM (Cardiology)

info@SonoPath.com