



PATIENT

Kramer Groschen

SPECIES

Canine

BREED

Chihuahua

SEX

MN

AGE

8 years

WEIGHT

8.7 lbs.

PRESENTING CLINICAL SIGNS

Coughing Currently on Vetmedin
Abnormal PE/Chem/CBC/UA Results: Murmur present 4/6

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

CANINE	MR	TR	LA/AO	LA/AO	FS	EF	EPSS
CARDIAC PARAMETERS	VMAX (m/s)	VMAX (m/s)	(Boon method)	(Heart Base; Swe)	(%)	(%)	(cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	<1.6	28-40	40-100	<0.6
PATIENT	5.5	2.1		1.53	41.2	75.4	0.2
CANINE	HR	AV	PV	BODY WEIGHT	LA	LVIDd	LVIDs
CARDIAC PARAMETERS	(BPM)	VMAX (m/s)	MAX (m/s)	(kg)	2D short axis Base view (cm)	Avg; 2D and m-mode short axis (cm)	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	141	1.0	0.88		2.1	1.7	

INTERPRETED BY

R. McKenzie Daniel,
DVM, DABVP
(Canine and Feline)

IMAGING PERFORMED BY

Sarah Pender, CVT

HOSPITAL NAME

SVS Imaging QC

REFERRING VET

Dr. Alexis Hughes

INVOICE

-

DATE

1/20/22

Cardiac Presentation

The echocardiogram in this patient demonstrated minor enlarged **left atrial** size based on 3 different LA measurement methods. Chamber volumes and echogenicity were normal. The cranial and caudal **mitral** valve leaflets presented vegetative thickening consistent with endocardiosis with mild prolapse of the septal leaflet. Doppler indicated measurable eccentric insufficiency. The **left ventricle** presented thicknesses with linear contour and was not dilated nor restricted. The **myocardium** presented normal echogenicity without subjective evidence of significant fibrotic or ischemic disease. **Contractility** of the ventricular walls was adequate and in normal range for this patient evidenced by the fractional shortening measurement and subjective evaluation of the different regions of the myocardium. The **left ventricular outflow** tract demonstrated normal laminar flow and subjective structural integrity. The **right atrium** and auricle revealed normal size, structure and content. No evidence of masses was noted or chamber overload. **Tricuspid** valvular assessment demonstrated mild thickening with minor insufficiency on color doppler assessment. The **right ventricle** was of normal size (1/3 diameter of LV), chordae structure, myocardial echogenicity and thickness. **Pulmonic** tract assessment revealed normal valve structure, laminar flow, and diameter (approx. 1:1 pa/ao ratio). No visible **pericardial** or free pleura fluid was noted. No echographically detectable evidence of infiltrative disease was visible. The cranial **mediastinum and pericardial regions** were free of masses in the visible window.



PATIENT

Kramer Groschen

SPECIES

Canine

BREED

Chihuahua

SEX

MN

AGE

8 years

WEIGHT

8.7 lbs.

INTERPRETED BY

R. McKenzie Daniel,
DVM, DABVP
(Canine and Feline)

IMAGING PERFORMED BY

Sarah Pender, CVT

HOSPITAL NAME

SVS Imaging QC

REFERRING VET

Dr. Alexis Hughes

INVOICE

-

DATE

1/20/22

ULTRASONOGRAPHIC FINDINGS

Primary Findings

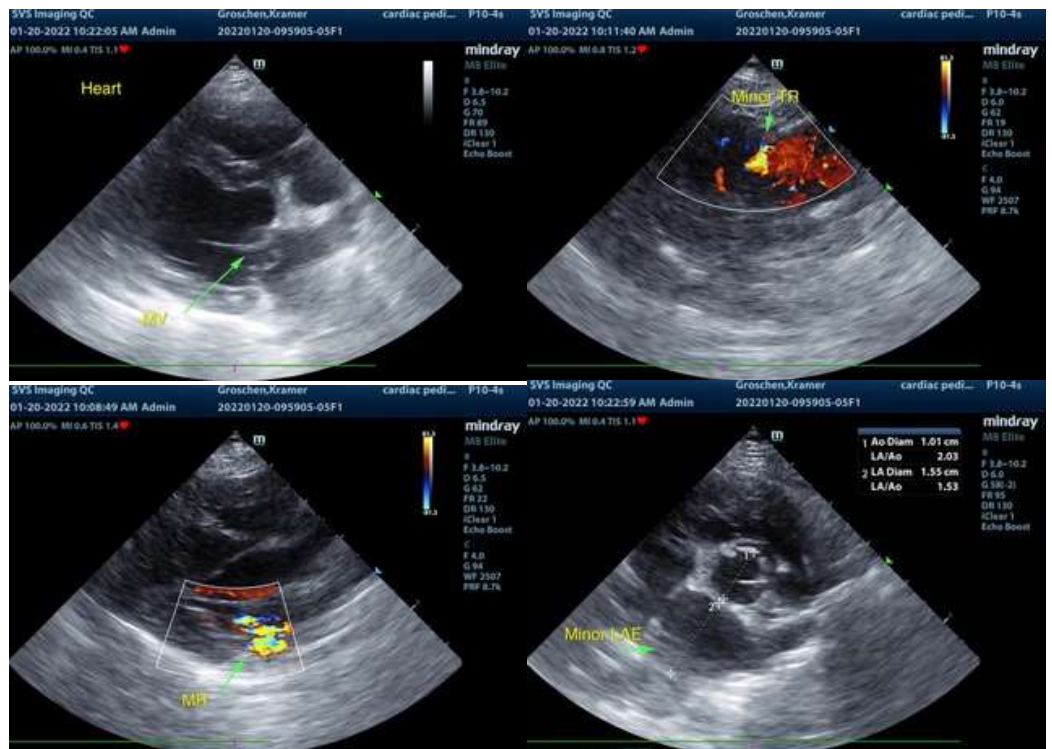
- Chronic mitral valve disease (ACVIM B1) with mild septal leaflet prolapse
- Minor TR - estimated pulmonary pressure gradient (<20 mmHg) not consistent with overt clinical pulmonary hypertension

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The cause of the murmur is chronic degenerative valvular changes with secondary eccentric mitral valve Insufficiency. No other clinical issues such as systolic dysfunction or evidence of clinical pulmonary hypertension were present. The lack of significant left atrium enlargement indicates that the risk of complications secondary to mitral valve insufficiency is relatively low.

Without evidence of significant chamber enlargement, cardiac medications are not specifically indicated. This also suggests that the coughing in this patient is noncardiogenic in origin. Consider potential for primary lower airway component to the cough.

Although cardiac medications are not specifically indicated at this stage, Vetmedin may help prolong cardiac changes associated with mitral valve Insufficiency. Recheck echocardiogram is suggested in 6 months to assess for evidence of progression, sooner if clinical signs suggestive of cardiac disease arise.





PATIENT

Kramer Groschen

SPECIES

Canine

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.

BREED

Chihuahua

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.

SEX

MN

**R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)
info@SonoPath.com**

AGE

8 years

WEIGHT

8.7 lbs.

INTERPRETED BY

R. McKenzie Daniel,
DVM, DABVP
(Canine and Feline)

**IMAGING
PERFORMED BY**

Sarah Pender, CVT

HOSPITAL NAME

SVS Imaging QC

REFERRING VET

Dr. Alexis Hughes

INVOICE

-

DATE

1/20/22