



PATIENT

Gizmo Friesen

SPECIES

Canine

BREED

Pomeranian

SEX

MN

AGE

6 years

WEIGHT

12 lbs.

INTERPRETED BY

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

IMAGING PERFORMED BY

Tracy Nyberg

HOSPITAL NAME

Stuga North VC

REFERRING VET

Dr. Kellie Presola

INVOICE

13141

DATE

1/25/22

PRESENTING CLINICAL SIGNS

Bilateral cataract surgery performed within the last 8 weeks--routine recovery. No cardiac abnormalities had been noted at either our clinic or referring clinic beginning of December but by January 9 significant grade III left systolic murmur appreciated. Nonclinical.

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO (Boon method)	LA/AO (Heart Base; Swe)	FS (%)	EF (%)	EPSS (cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	<1.6	28-40	40-100	<0.6
PATIENT				1.38	55.4	90.1	0.2
CANINE CARDIAC PARAMETERS	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT (kg)	LA 2D short 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	BELOW	BELOW	BELOW	BELOW
PATIENT	NM				2.3	2.24	

Cardiac Presentation

The echocardiogram in this patient demonstrated normal **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 subjective prolapse of the septal mitral valve leaflet. Doppler indicated 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 adequate linear morphology. 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

Gizmo Friesen

SPECIES

Canine

BREED

Pomeranian

SEX

MN

AGE

6 years

WEIGHT

12 lbs.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Thickened mitral valve with mild septal leaflet prolapse
- Eccentric MR

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The study is consistent with degenerative mitral valve changes and septal leaflet prolapse with secondary eccentric mitral valve insufficiency. This is suggestive of early-onset chronic degenerative mitral valve changes without a reported history of previous murmur. No evidence of chordae tendineae rupture was noted. The lack of left atrium enlargement at this time indicates that the relative current risk for complication is low. However, the prognosis at this stage is highly variable.

No Indication for cardiac medications was evident, given the lack of left heart chamber enlargement. Serial sonographic monitoring is recommended for further prognosis. Recheck echocardiogram is suggested in 6 months, sooner if clinical signs consistent with heart disease arise. No other clinical issues such as systolic dysfunction or evidence of overt clinical pulmonary hypertension were noted.

INTERPRETED BY

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

IMAGING PERFORMED BY

Tracy Nyberg

HOSPITAL NAME

Stuga North VC

REFERRING VET

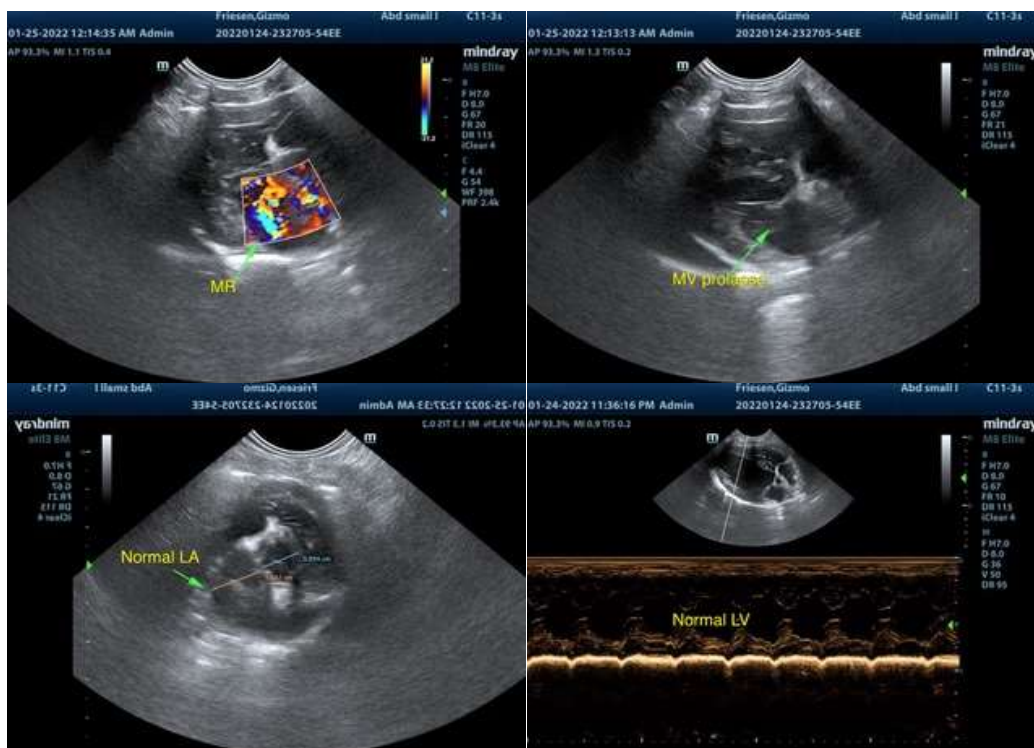
Dr. Kellie Presola

INVOICE

13141

DATE

1/25/22



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.



PATIENT

Gizmo Friesen

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.

SPECIES

Canine

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

BREED

Pomeranian

SEX

MN

AGE

6 years

WEIGHT

12 lbs.

INTERPRETED BY

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

**IMAGING
PERFORMED BY**

Tracy Nyberg

HOSPITAL NAME

Stuga North VC

REFERRING VET

Dr. Kellie Presola

INVOICE

13141

DATE

1/25/22