


**PATIENT PRESENTING CLINICAL SIGNS**

Tonito Koistinen

Pt has severe dental disease, oral abscess - possibly involving wire placed due to jaw fracture from dog attack 1 year prior. Looking for pre-surgical assessment of cardiac function/progression of disease.

**SPECIES**

Canine

 Abnormal PE/Chem/CBC/UA Results: **ABNORMAL** Laboratory Findings No recent labwork. Heart Rate and Respiratory Rates 132/pant Blood Pressure Measurements not taken Current Medications Furosemide, Enalapril, Vetmedin Radiographic Findings None taken

**BREED**

Maltese

**ULTRASONOGRAPHIC EXAMINATION OF THE HEART**
**SEX**

MN

**AGE**

11yr

**WEIGHT**

10lb

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			1.4	1.2	35	68	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				
PATIENT	NM	1.3	1.1		2.9	2.7	

**INTERPRETED BY**

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

**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 mild to moderate thickening consistent with endocardiosis. 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. No significant TR on Doppler. 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.

**IMAGING PERFORMED BY**

Sara Hansen

**HOSPITAL NAME**

 Countryside Animal  
 Clinic

**REFERRING VET**

Dr. Cox

**INVOICE**

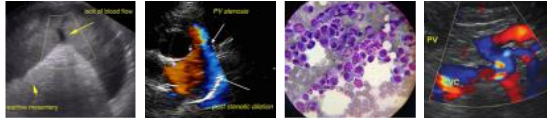
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**DATE**

07/28/2023

**ULTRASONOGRAPHIC FINDINGS**

- Normal LA/LV.



**PATIENT**

- Normal RA/RV.
- Thickened mitral valve-consistent with endocardiosis.

Tonito Koistinen

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**SPECIES**

The study is most consistent with chronic degenerative valvular changes and likely secondary eccentric mitral valve insufficiency if a murmur is present in this patient. No clinical issues such as clinical pulmonary hypertension or LV systolic dysfunction are present.

Canine

**BREED**

The hemodynamic effects of the MR at this stage appear to be low and indicate that risk of complication due to MR is low. In a presumed non-clinical patient, cardiac medications are not required at this stage.

Maltese

**SEX**

No anesthetic contraindications at this time. Suggested anesthetic protocol may include opioid or Benzodiazepine pre-med, induction with Propofol or Alfaxalone, and appropriate gas anesthesia with avoidance of alpha 2 agonists.

MN

**AGE**

Prognosis at this stage is variable and serial sonographic monitoring is recommended with a recheck echocardiogram in 6 months, sooner if clinical signs suggestive of heart disease develop.

11yr

**WEIGHT**

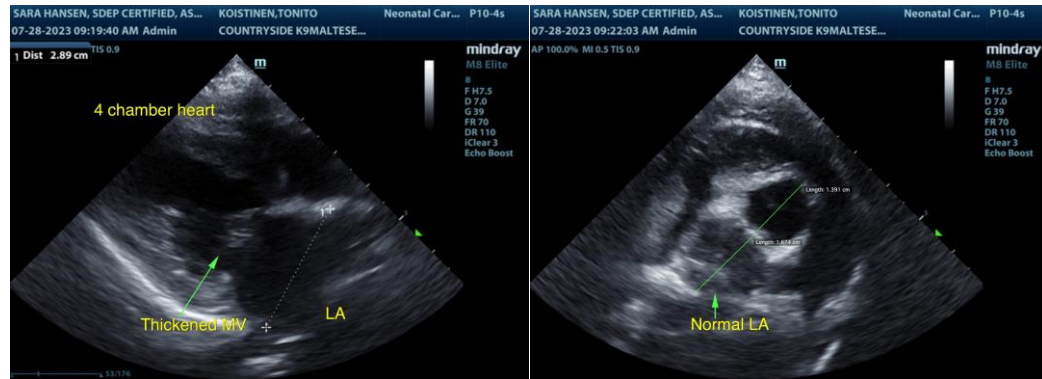
10lb

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Sara Hansen



**HOSPITAL NAME**

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.

Countryside Animal  
Clinic

**REFERRING VET**

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.

Dr. Cox

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)

**INVOICE**

info@SonoPath.com

14436ag

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