**PATIENT**

Baby Rudmanis

PRESENTING CLINICAL SIGNS

Presented for tartar on teeth and needs dental. During PE a 3/6 systolic heart murmur was noted. Would like sedation and anesthesia recommendation for dental.

SPECIES

Canine

ULTRASONOGRAPHIC EXAMINATION OF THE HEART**BREED**

Chihuahua X

SEX

Spayed Female

AGE

9 Years

WEIGHT

16.4 Pounds

| 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 | 5.8 | <2.0 | 1.7 | 1.7 | 48.4 | 82.1 | 0.25 |
| CANINE CARDIAC PARAMETERS | HR (BPM) | AV VMAX (m/s) | PV VMAX (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 | 144 | 1.0 | 0.91 | | 3.16 | 2.6 | |

Cardiac Presentation**INTERPRETED BY**

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

IMAGING PERFORMED BY

Kim Liedberg

HOSPITAL NAME

SVS Imaging WI

REFERRING VET

Dr. Banceu

The echocardiogram for this patient presented mildly excessive **left atrial size** expressed both in the LA/AO and LA max measurements. Subtle deviation of the intraatrial septum towards the right atrium noted, suggestive of minor increased left atrial pressure. The cranial and caudal **mitral valve** leaflets presented vegetative thickening consistent with endocardiosis. Doppler indicated measurable eccentric insufficiency. No evidence of mitral valve prolapse or chordae tendineae rupture. 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.

INVOICE

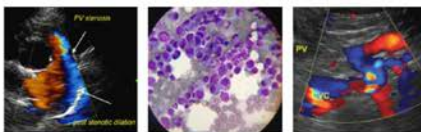
34177

DATE

1/13/22

ULTRASONOGRAPHIC FINDINGS

- Chronic mitral valve disease (ACVIM mild B2)



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BREED

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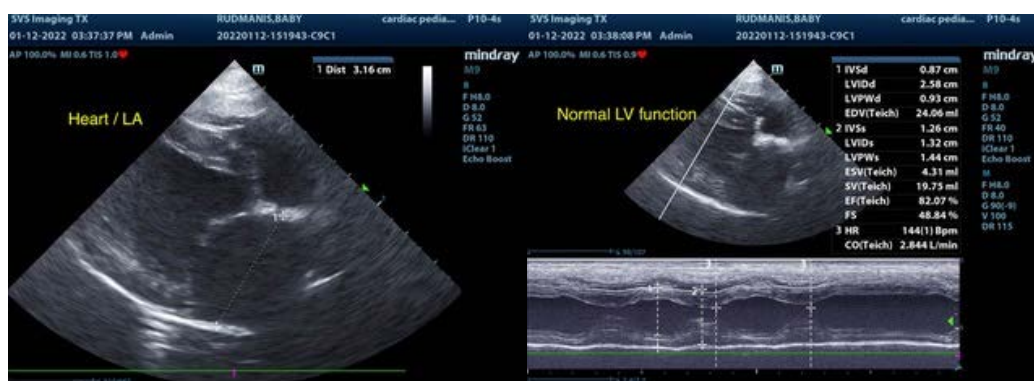
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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The cause of the murmur is secondary to chronic degenerative valvular changes and eccentric mitral valve insufficiency. The mild LA enlargement suggests that the potential risk for complication is elevated, yet overall, the heart appears to be compensated. In a non-clinical patient without evidence of significant LA/LV enlargement, specific cardiac medications are not indicated. However, serial sonographic monitoring is needed for further prognosis. No anesthetic contraindications. 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. Recheck echocardiogram suggested in 6 months, sooner if clinical signs suggestive of heart disease initiate.



The information and recommendations provided are based on the images presented by the referring veterinarian. 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.

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