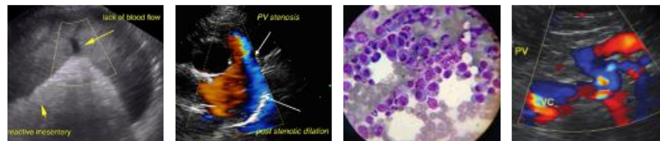
SonoPath

Clinical Sonography & Telecytology

EDUCATIONAL TELECONSULTATION SERVICES™



SonoPath.com

1-800-838-4268 info@sonopath.com

PATIENT

Ziggy Klevans

SPECIES

Canine

BREED

Jack Russell Mix

SEX

MN

AGE

13yr

WEIGHT

16.4lb

INTERPRETED BY

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

IMAGING PERFORMED BY

Meredith Swart

HOSPITAL NAME

Swart Veterinary Imaging

REFERRING VET

Meredith Swart

INVOICE

12208ag

DATE

11/21/2022

PRESENTING CLINICAL SIGNS

History of grade II murmur. Patient in need of dental cleaning. Echo is pre-operative.

Abnormal PE/Chem/CBC/UA Results: ALT mildly elevated at 131

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	<1.3	28-40	40-100	<0.6
PATIENT		2.0		1.37	43.2	78	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	1.5	0.92		2.6	2.2	

Cardiac Presentation

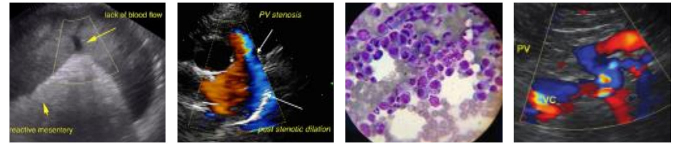
The echocardiogram in this patient demonstrated normal left atrial size based on 3 different LA measurement methods. Chamber volumes and echogenicity were normal. The cranial and caudal mitral valve leaflets presented mild thickening consistent with mild endocardiosis. No evidence of valvular prolapse. 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 subjective mild thickening with mild 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.

ULTRASONOGRAPHIC FINDINGS

- Normal cardiac structure and function
- Suspect compensated mild mitral valve insufficiency (ACVIM B1)
- Minor TR-no evidence of clinical pulmonary hypertension

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The cause of the murmur is suspected to be secondary to mild mitral valve insufficiency especially if the low-grade murmur is left sided. The lack of left atrial enlargement implies that the risk of



SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT

Ziggy Klevans

SPECIES

Canine

BREED

Jack Russell Mix

SEX

MN

AGE

13yr

WEIGHT

16.4lb

INTERPRETED BY

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

IMAGING PERFORMED BY

Meredith Swart

HOSPITAL NAME

Swart Veterinary Imaging

REFERRING VET

Meredith Swart

INVOICE

12208ag

DATE

11/21/2022

complication secondary to mild mitral valve insufficiency is relatively low at this time and, without additional clinical signs such as LV systolic dysfunction or evidence of clinical pulmonary hypertension, indicates that medical therapy is not required at this stage. Prognosis at this stage is variable and conservative serial sonographic monitoring is recommended with a recheck echocardiogram in 6-12 months, sooner if murmur intensity increases or clinical signs suggestive of heart disease develop. 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.

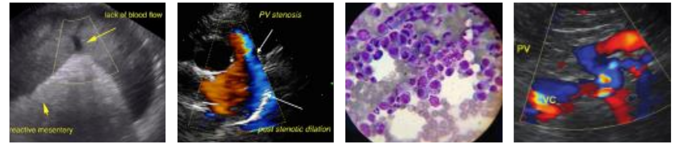
The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

SonoPath

Clinical Sonography & Telecytology

EDUCATIONAL TELECONSULTATION SERVICES™



SonoPath.com™

1-800-838-4268 info@sonopath.com

PATIENT

Ziggy Klevans

SPECIES

Canine

BREED

Jack Russell Mix

SEX

MN

AGE

13yr

WEIGHT

16.4lb

INTERPRETED BY

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

IMAGING PERFORMED BY

Meredith Swart

HOSPITAL NAME

Swart Veterinary Imaging

REFERRING VET

Meredith Swart

INVOICE

12208ag

DATE

11/21/2022

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

info@SonoPath.com