IMAGING PERFORMED BY

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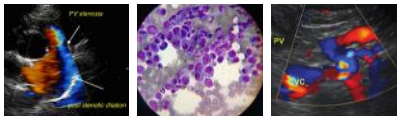

SonoPath
Clinical Sonography & Telecytology
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PATIENT
Biscuit Gorham

SPECIES
Canine

BREED
Yorkie

SEX
Male Intact

AGE
10.30.14

WEIGHT
16.4lbs

INTERPRETED BY
Maggie Machen Lamy, DVM, DACVIM (Cardiology)

HOSPITAL NAME
DocSide Veterinary Medical Center

REFERRING VET
Dr. Tierney

INVOICE
29706

DATE
3.20.23

CLINICAL SIGNS

History: Grade 2/6 systolic murmur in November. 03/04/2023 murmur grade 2-3/6. Assess anes risk
-Pertinent abnormal PE/Chem/CBC/UA Results: Total protein 8.3, Globulin 4.3, pH 8.5, 2+ protein
-Current medications: None listed.
-Sedation used: Gaba/Traz PO.
-Pertinent previous ultrasound results: No previous.
-STAT: Not requested
-Imaging performed by: Stephanie Warga RDCS, RVT.

RADIOGRAPHIC FINDINGS *NOTE: Images submitted for supplemental information only.

Normal cardiac silhouette. No obvious evidence of CHF.

ELECTROCARDIOGRAPHIC FINDINGS

A six lead ECG is available at both 25 and 50mm/s; 2mm/mV. The average heart rate is 150bpm (range 136-166bpm). The rhythm is sinus in origin, with a p for every QRS complex and vice versa. The P wave morphology is positive with a normal dimension. Normal PR. The QRS morphology is positive with normal dimension. MEA is normal. No ectopic beats, pauses or dysrhythmias observed.
ECG diagnosis: Normal sinus rhythm with respiratory variation.

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. Minimal diffuse thickening of mitral valve leaflets with no obvious prolapse into the left atrial lumen. Trivial mitral regurgitation is identified. Normal left atrial dimension. Normal LV diameter with adequate myocardial function. The tricuspid valve appears subjectively normal, with trivial tricuspid regurgitation. Normal velocity. The right heart is normal (subjective). No overt evidence of pulmonary arterial hypertension. The pulmonic and aortic valves are normal in morphology and mobility. No aortic abnormalities identified, however the LVOT velocity is normal. Mildly elevated pulmonic outflow velocities is noted depending on heart rate, dynamic profile. No aortic or pulmonic insufficiency. No pericardial or pleural effusion noted. No cardiac tumors observed.

CARDIAC CHART

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	NM	2.0	NM	1.2	52	86	NM
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	230	1.6	1.0	7.4	1.6	2.0	1.0
*Normal chamber parameters expressed as a mean value (SD)				3	1.27 (5.3)	2.46 (2.46)	1.36 (5.5)

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The only cause of a murmur identified is increased flow velocity through the RVOT/pulmonary artery. Trivial MR and TR may suggest early valve disease and follow up is recommended. No obvious subvalvular ridge or valvular abnormalities are visualized, and in the absence of structural abnormalities this is considered a benign flow murmur. This is supported by the abnormality resolving with lower heart rates. If this is a new murmur, it is reasonable to monitor periodically via recheck echocardiography in the future. No additional issues are identified. A baseline BP is recommended.

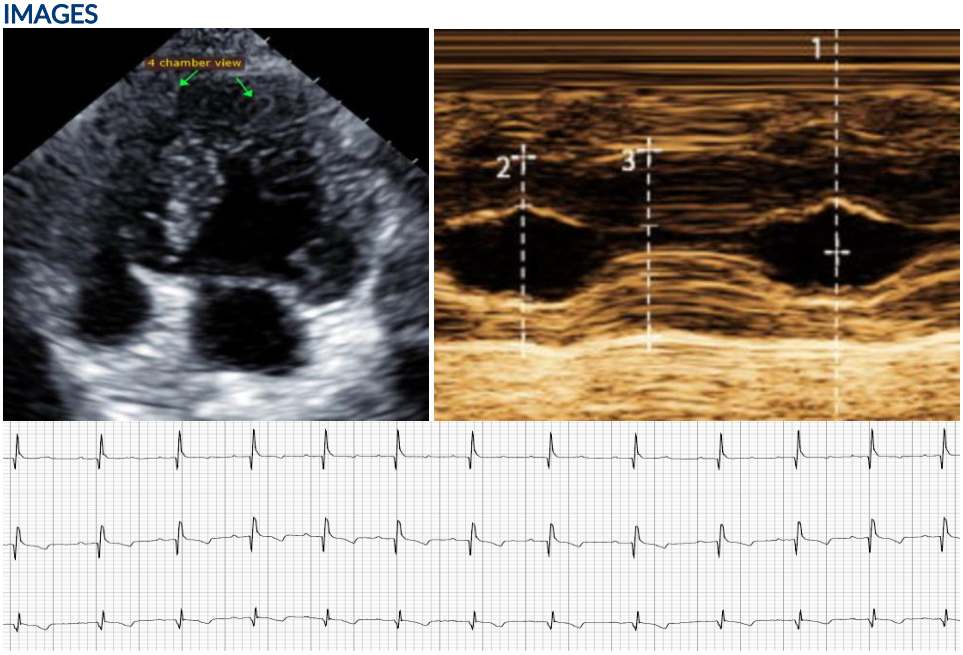
The ECG is unremarkable with a respiratory sinus arrythmia. Periods of tachycardia are noted throughout the study; however, these are suspected to be sinus in origin. If this does not match what was heard on exam, a longer tracing or potentially a holter monitor may be warranted.

No cardiac medications are indicated. No cardiac contraindication for general anesthesia.

Monitor for any development of cough, labored breathing or exercise intolerance.

Recommend recheck echocardiogram in 1 year to screen for progression or development of concurrent cardiac disease that the preexisting murmur may mask.

IMAGES



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. This report was generated using transcription software, and minor dictation errors may be present. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance please contact me.

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