



PATIENT PRESENTING CLINICAL SIGNS

Duke Landi History: Pre-anesthetic work up revealed 1st degree AV block - chest radiographs and echo were recommended by specialist that read ECG. No current meds. Blood work unremarkable.

SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE HEART

Canine

BREED	CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO (Boon method)	LA/AO (Heart Base; Swedish)	FS (%)	EF (%)	EPSS (cm)
Labrador Retriever Mix								
SEX	NORMAL PARAMETER	4.5-5.5	<2.7	1.3	<1.6	28-40	40-100	<0.6
Neutered male	PATIENT	0.85 – clinically insignificant	0.67 – clinically insignificant	1.08	1.08	30%	5	NM
AGE	CANINE CARDIAC	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT (kg)	LA 2D long axis Base view	LVIDd Avg; 2D and m-mode short axis	LVIDs Avg; 2D and m-mode short axis
4 years								
	NORMAL PARAMETER	50-100	0.7-1.7	0.7-1.6				
WEIGHT	PATIENT	120	1.49	1.05	37.3	3.32	4.68	3.27
82 lbs								
Adapted from June Boon, Veterinary Echocardiography, 1998 Sisson D et al. JVIM 1991; 5: 232, and Jacobs et al. Am J Vet Res 1985; 46:1705								

INTERPRETED BY

Lisa Carioto, DVM, DVSc, Diplomate ACVIM

Echocardiographic findings

Note, an arrhythmia was not observed (“to the eye”) during the echocardiogram.

Mitral valve

- No abnormalities with either leaflet
- No prolapse of both leaflets.
- Mild to moderate mitral regurgitation.
- No left atrial enlargement
- No left auricular enlargement.
- No increase of LA: Ao ratio
- LA normalized for BW (LAN = 0.97); high end of normal reference range
- LVIDd normalized for BW (LVIDND = 1.6); high end of normal reference range
- LVIDs normalized for BW (LVIDNs = 1.04); within normal limits (WNL)

Aortic valve

IMAGING PERFORMED BY

Kelly Vazquez, CVT

HOSPITAL NAME

Midland Park VH

REFERRING VET

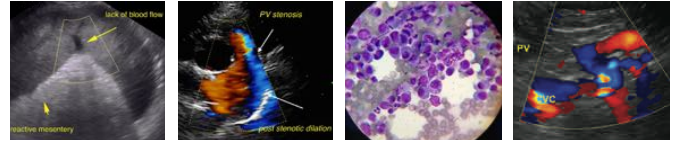
Dr. Shokoff

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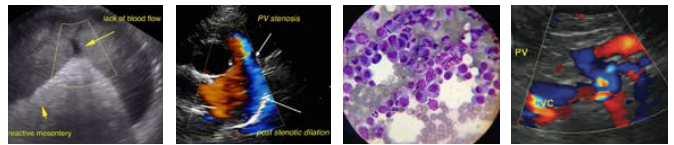
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PATIENT	<ul style="list-style-type: none"> No abnormalities with either leaflet
Duke Landi	<ul style="list-style-type: none"> No aortic insufficiency
SPECIES	<i>Tricuspid valve</i>
Canine	<ul style="list-style-type: none"> No abnormalities with either leaflet Tricuspid regurgitation: trivial, noted on left parasternal, 4 chamber apical view No right ventricular or atrial enlargement.
BREED	<i>Pulmonic valve</i>
Labrador Retriever Mix	<ul style="list-style-type: none"> No abnormalities with either leaflet No pulmonary insufficiency. Main pulmonary artery within normal limits. Pulmonary artery - bifurcation, no abnormalities. Pulmonary artery: aortic ratio within normal limits. No signs of heart worm.
SEX	<i>Other</i>
Neutered male	<ul style="list-style-type: none"> No signs of pericardial or pleural effusion Pulmonary veins, no abnormalities. No evidence of pulmonary edema. No obvious signs of a mass. Endocardium and myocardium: NAF <i>Possible</i>, very small ventricular septal defect (left to right), but requires additional views to confirm. Not clinically significant based on size of defect.
AGE	
4 years	
WEIGHT	
82 lbs	
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HOSPITAL NAME	ULTRASONOGRAPHIC FINDINGS
Midland Park VH	<ul style="list-style-type: none"> There are no obvious valve abnormalities The mild to moderate mitral regurgitation noted with colour Doppler is not clinically significant when measured with spectral Doppler. The trivial tricuspid regurgitation noted with colour Doppler is not clinically significant when measured with spectral Doppler. The left atrium and left ventricle are at the high end of the normal reference ranges and the fractional shortening is at the low end. Labrador retrievers tend to be athletic and have larger hearts compared to other breeds. Athleticism would also explain first degree atrioventricular block, which was previously described.
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PATIENT

Duke Landi

- A possible, very small (i.e. not measurable), left to right, ventricular septal defect (VSD) may be present based on two views. However, additional views are required to confirm. Even if present, a VSD of its size is not clinically significant and would have clinical consequences in the future.

SPECIES

Canine

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Additional cardiac views are required to confirm the presence of absence of a VSD; medication will not be required.

BREED

Labrador Retriever Mix

To ensure cardiac size is due to athleticism, please confirm Duke's activity level. If he is not athletic or muscular, please assess his diet to ensure occult dilated cardiomyopathy is not playing a role in today's findings. The latter is unlikely based on the results of the interventricular septum and left ventricular free wall.

SEX

Neutered male

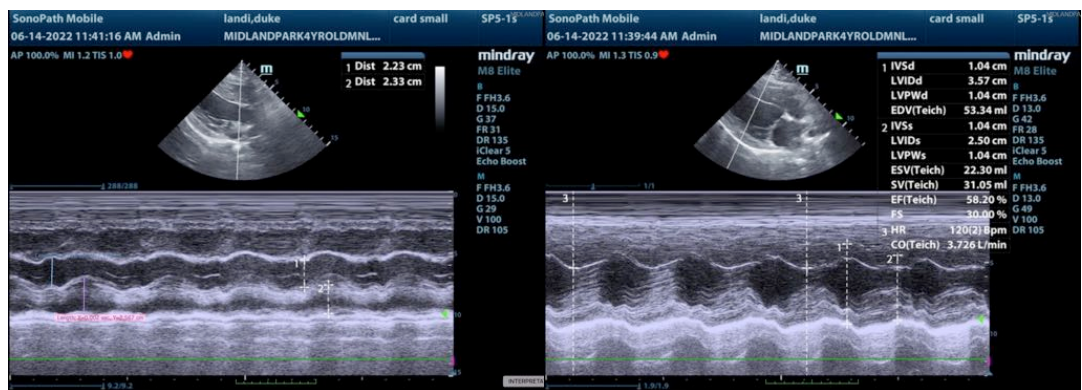
If a grain free or raw meat diet is being fed, a diet change is strongly recommended and a re-evaluation of the echocardiogram is suggested in 3 to 6 months.

AGE

4 years

WEIGHT

82 lbs



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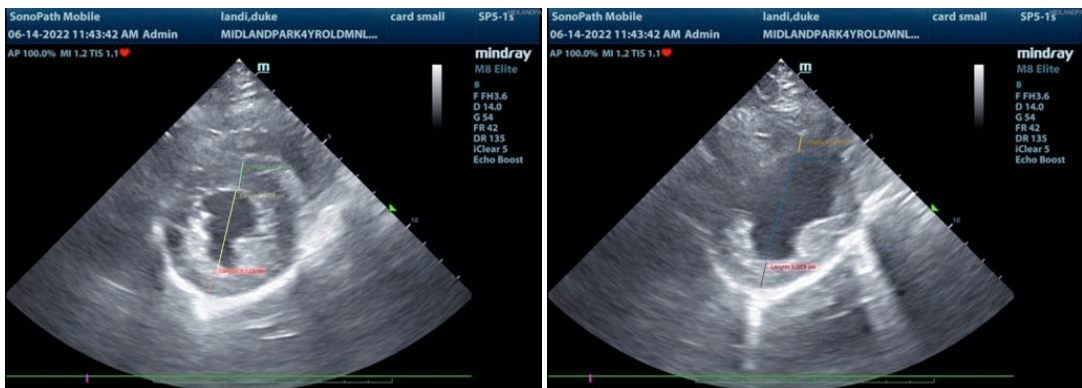
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PATIENT

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SPECIES

Canine

BREED

Labrador Retriever
Mix

SEX

Neutered male

AGE

4 years

WEIGHT

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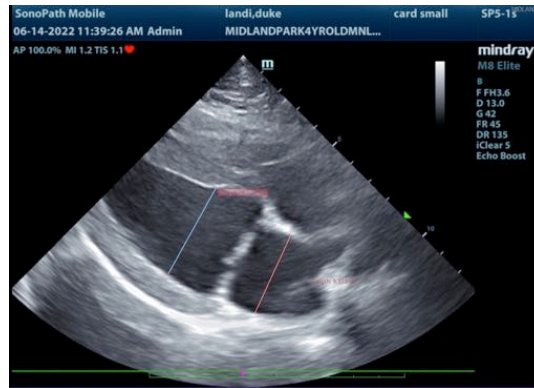
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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