



PATIENT

Zoey Milner

SPECIES

Canine

BREED

Miniature Pinscher

SEX

Spayed female

AGE

14 years

WEIGHT

10.4 lbs

PRESENTING CLINICAL SIGNS

History: O thinks P has been having seizures, suddenly falling er stiff and limping when O picks up, losing bowel control during the episode, started 5 days ago and has happened once a day, tachycardic after, had an episode before the visit Eating/Drinking- normal Coughing/Sneezing: coughs on and off, sometimes will happen after barking at another dog in the house, happens mostly evening Meds-none
 Abnormal PE/Chem/CBC/UA Results: BUN- 26 mg/dl BG- 138 mg/dl

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

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 vegetative thickening consistent with endocardiosis. Prolapse of the anterior mitral valve leaflet was noted, yet no volume overload noted. Doppler indicated measurable insufficiency. 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.

INTERPRETED BY

Eric Lindquist, DMV
 DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Dr. Evoniuk

HOSPITAL NAME

State Ave VC

REFERRING VET

Dr. Evoniuk

INVOICE

43019

DATE

2/28/23

CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO (Boon method)	LA/AO (Heart Base:)	FS (%)	EF (%)	EPSS (cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	<1.6	28-40	40-100	<0.6
PATIENT	>5.0	-	1.1	1.3	45	NM	NM
CANINE CARDIAC PARAMETERS	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT	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	NM	NM	0.6	10.4 lbs	1.3	2.3	



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ULTRASONOGRAPHIC FINDINGS

Mitral valve prolapse without volume overload.

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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The seizure activity and coughing is not cardiogenic at this point given that no volume overload is noted. However, significant valvular disease is present. Skull and chest CT is ideal given the coughing. However, skull CT with contrast would be in this patient's best interest given the age and seizure activity to rule out the primary CNS disease. Blood pressure measurements are indicated.

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The heart is stable without clinical disease. No overt contraindication for anesthesia of brief to moderate duration. I suggest Torbutrol premed, Propofol induction, Isoflo maintenance or similar protocol if anesthesia is desired. Blood pressure recommended if not already performed and target white coat negative systolic pressure of < 160 mmHg. If higher than this ACE-inhibitor is suggested to reach this level. Recheck echocardiogram is recommended in 6 months, earlier if murmur grade increases or clinical signs initiate.

AGE

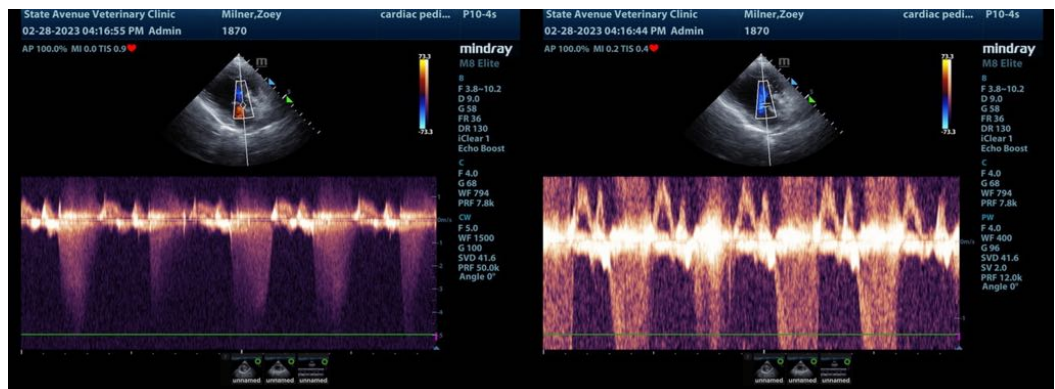
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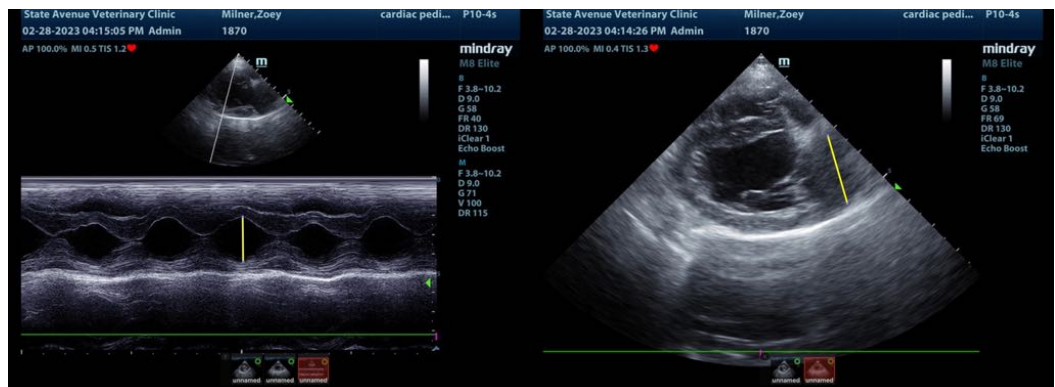
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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