



PATIENT PRESENTING CLINICAL SIGNS

Oliver Blanco

History: Came in for a routine checkup and Doctor noticed a grade 4 out of 6 Heart Murmur. Normal eating and drinking. Normal Stool and Urine. No coughing, sneezing, diarrhea, and vomit.

SPECIES

Canine

BREED

Yorkshire Terrier

SEX

Neutered male

AGE

10 years

WEIGHT

9.6 lbs

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Dr. Kim

HOSPITAL NAME

Ridgefield Park AH

REFERRING VET

Dr. Kim

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. 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.

| 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 | 6.2 | | 1.6 | 1.2 | 49 | | 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 | | | | |
| PATIENT | | 1.5 | 1.1 | 9.6 lbs | 2.4 max | 2.88 | |

ULTRASONOGRAPHIC FINDINGS

INVOICE

92445

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Stage B1 valvular disease.

Minor mitral insufficiency noted.



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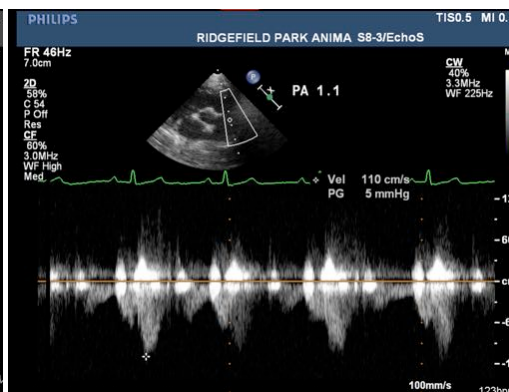
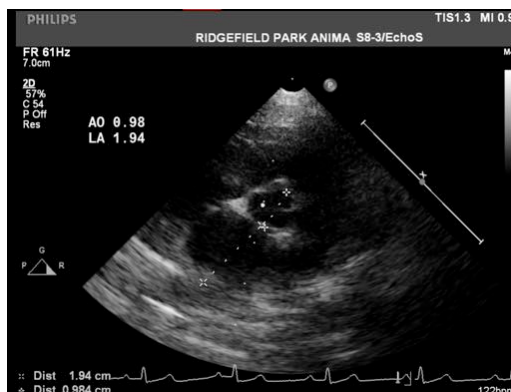
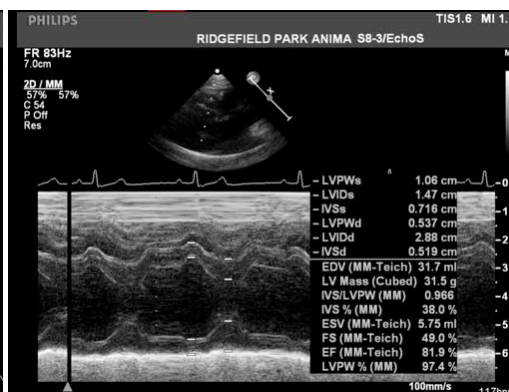
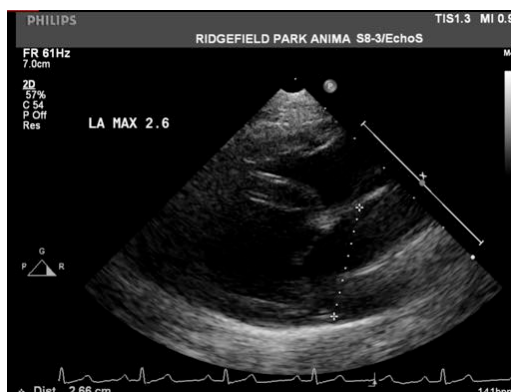
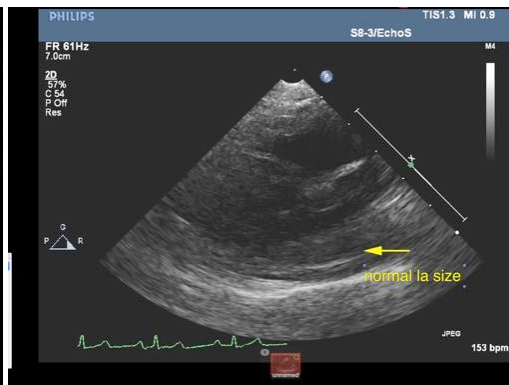
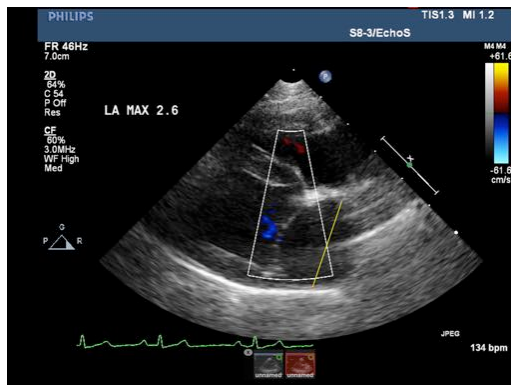
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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There is no evidence of significant volume overload. If anesthesia is necessary, there is no overt contraindication to an anesthetic procedure. Suggested protocol includes Torbutrol premed, Propofol induction, and Isoflurane maintenance. Recheck echocardiogram in 6 months or earlier if murmur grade increases or clinical signs initiate.





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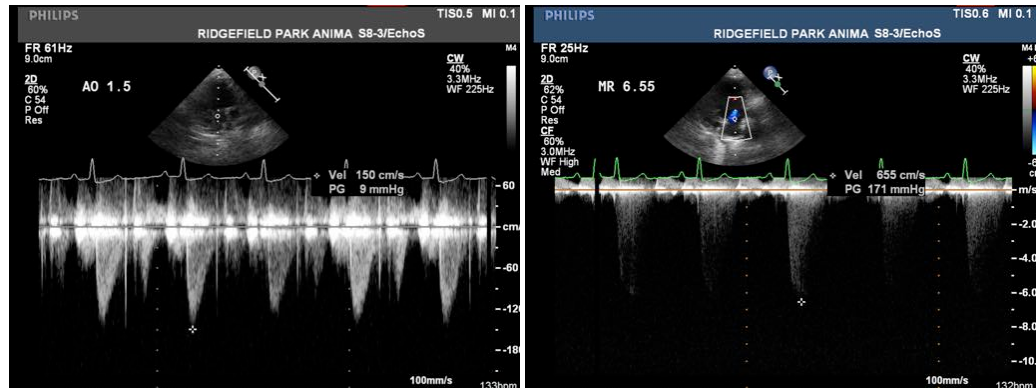
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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
info@SonoPath.com