



PATIENT PRESENTING CLINICAL SIGNS

Pippen Hough History: heart murmur

SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE HEART

Canine

BREED

ShihTzu

SEX

Intact Male

AGE

8 Weeks

WEIGHT

N/A

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	6.0	--	1.15	1.11	58	91	0.1
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	
PATIENT	185	1.60	.80	--	1.8	1.24	--

Cardiac Presentation

The echocardiogram in this patient demonstrated normal **left atrial** size based on 3 separate methods of LA evaluation. The mitral valve was thickened and vegetative consistent with clubbed leaflets. Primary mitral valve dysplasia suspected. Mitral insufficiency noted at 6.0 m/s. Concentric **left ventricular** hypertrophy noted in this patient. 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. **Tricuspid** valvular assessment demonstrated adequate linear morphology and kinesis. The **right ventricle** was of normal size (1/3 diameter of LV), chordae structure, myocardial echogenicity and thickness. **Pulmonary outflow** 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. The cranial **mediastinum and pericardial and extra-cardiac regions** were free of masses in the visible window. A large amount of respiratory interference present.

ULTRASONOGRAPHIC FINDINGS

- Mitral insufficiency with abnormal mitral valve leaflets. Primary mitral dysplasia suspected.
- Concentric left ventricular hypertrophy

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The clinical significance to define further at 6 months of age. Prognosis long term is guarded. Follow

INTERPRETED BY

Eric Lindquist, DMV DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Diane McFadden

HOSPITAL NAME

Animal General (Augusta)

REFERRING VET

Dr. Castimore

INVOICE

13224

DATE

12/29/21



PATIENT

up echocardiogram should be performed under full sedation in this patient given the respiratory interference.

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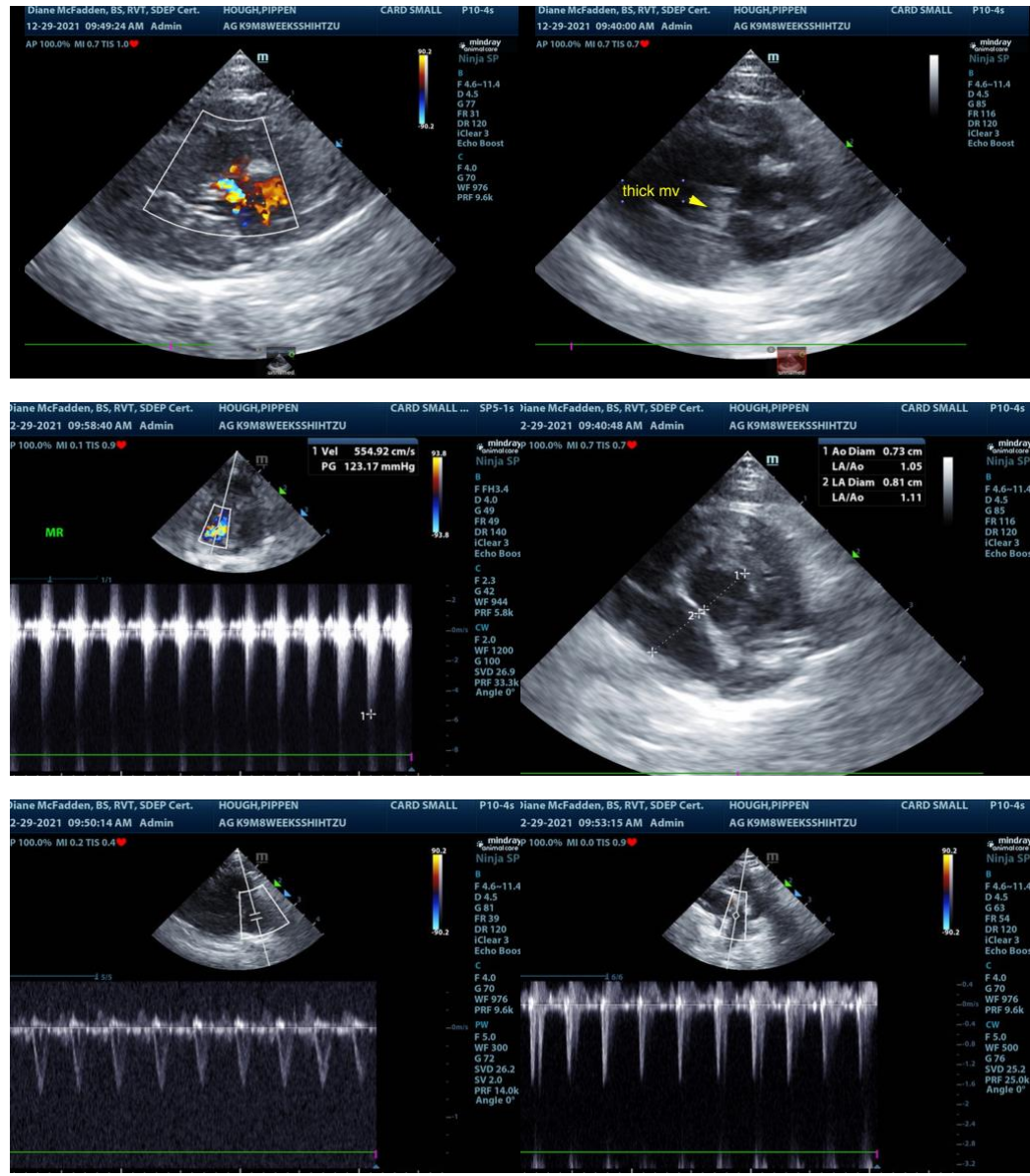
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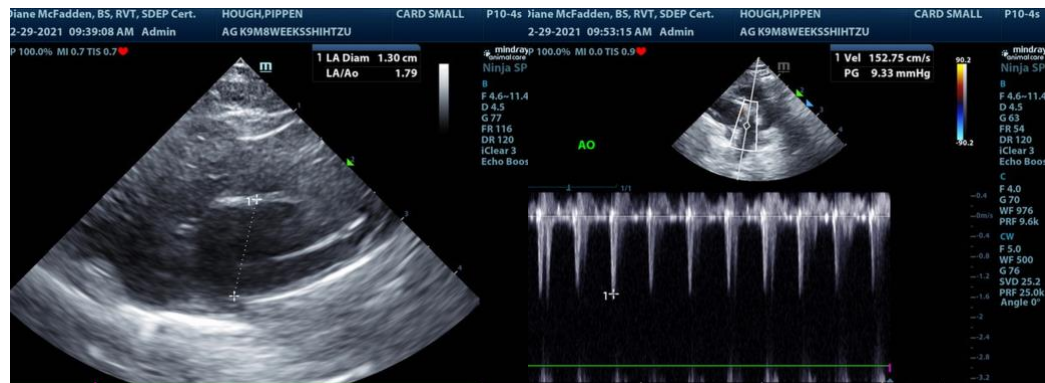
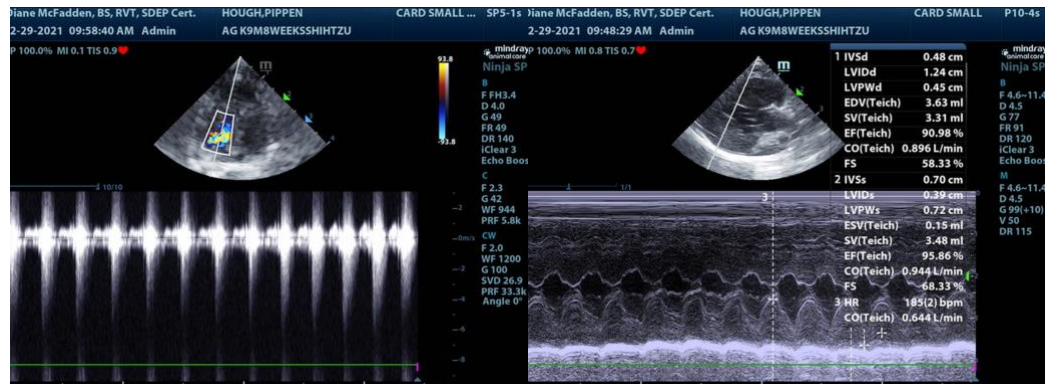
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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
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