



**PATIENT PRESENTING CLINICAL SIGNS**

Jewel Williams

History: Grade 2/6 heart murmur.

**SPECIES ECHOCARDIOGRAM FINDINGS**

Feline

2D, m-mode, color flow and doppler imaging is available. The left ventricular wall is normal in dimension with regions of remodeling. There is mild fibrosis and ventricular remodeling. Papillary muscles normal. The right ventricle is normal. There is no left atrial enlargement present. No right atrial enlargement present. The MV is poorly visualized; however, abnormal anterior motion of the mitral valve is suspected based upon color flow imaging. The anterior leaflet of the MV is mildly thickened, consistent with some degree of dysplasia. There is no aortic regurgitation present. Mild to moderate eccentric mitral regurgitation. Normal velocity. No TR. No other obvious valvular regurgitation is present. There is no pericardial effusion noted. No pleural effusion appreciated.

**BREED**

DSH

**SEX**

Female Spayed

**CARDIAC CHART**

**AGE**

3 years

**WEIGHT**

10lbs

**INTERPRETED BY**

Maggie Machen  
Lamy, DVM, DACVIM  
(Cardiology)

**IMAGING PERFORMED BY**

Rebekah Jakum, CVT  
ARDMS/RVT

**HOSPITAL NAME**

Blud Ridge Veterinary  
Clinic

**REFERRING VET**

Dr. Filchner

**INVOICE**

27803

**DATE**

12/5/22

FELINE CARDIAC PARAMETERS	BODY WEIGHT (kg)	HR (BPM)	IVSd (cm) (Moise, Pipers)	LVIDd (cm) (Moise, Pipers)	LWVd (cm) (Moise, Pipers)	FS (%)	EF (%)
NORMAL PARAMETER	-----	150-240	0.35-0.55	<2 (mean 1.5)	3.5-0.55	35-67	80-100
PATIENT	4.5	150	0.46	1.47	0.51	40	74
FELINE CARDIAC PARAMETERS	LA/AO (Boon)	LA/AO HEART BASE (Swe) (Abbott)	LA 2D short axis Base view (cm) (Abbott)		LVOT VEL (m/s)	RVOT VEL (m/s)	E max (m/s)
NORMAL	<1.5	<1.3	<1.2		<1.6	<1.3	<0.9
PATIENT	NM	1.0	1.0		1.2	1.2	NM

*\*Note: All measurements based upon multi-modal images and methods. An average value is reported.*  
Adapted from June Boon, Veterinary Echocardiography, 1998  
Abbott J & MacLean H JVIM 2006;20: 111-119, Moise et al. Am J Vet Res 47:1476, 1986. Pipers et al. Am J Vet Res 40:882, 1979.

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The presumptive diagnosis and cause of the murmur is mitral valve dysplasia leading to an obstructive LVOT flow pattern and secondary MR. The MV is poorly visualized; however, an LVOTO is suspected. Additionally, significant MR is present which is also contributing to the murmur and is likely secondary to abnormal valve motion. Regardless, there is no left atrial dilation nor LV hypertrophy, indicating the risk of spontaneous CHF and/or a thrombotic event is currently low.

While no medications have been shown to definitively alter long term outcome at this stage of disease, atenolol is often initiated to decrease the outflow obstruction. In cases of solely primary MV dysplasia this can lead to improvement in the degree of obstruction and hypertrophy. Given the young age of the cat and no LV hypertrophy being present, this is not yet indicated. Simple follow up is advised. In the interim, monitor at home for any respiratory signs or evidence of blood clot events (neurologic change, paralysis, etc.).



**PATIENT**

Jewel Williams

These findings do not pose a significant risk for general anesthesia. Judicious IV fluid rates are advised to avoid fluid overload. Additionally, drugs that stimulate heart rate should be avoided unless clinically necessary (glycopyrrolate, atropine). Avoid vasodilators as this may worsen the obstruction. A reasonable protocol includes opioid/benzodiazepine premedication, propofol induction, isoflurane maintenance.

**SPECIES**

Feline

Recommend recheck echocardiogram in 6-12 months to screen for progression, sooner if clinical issues arise.

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DSH

**SEX**

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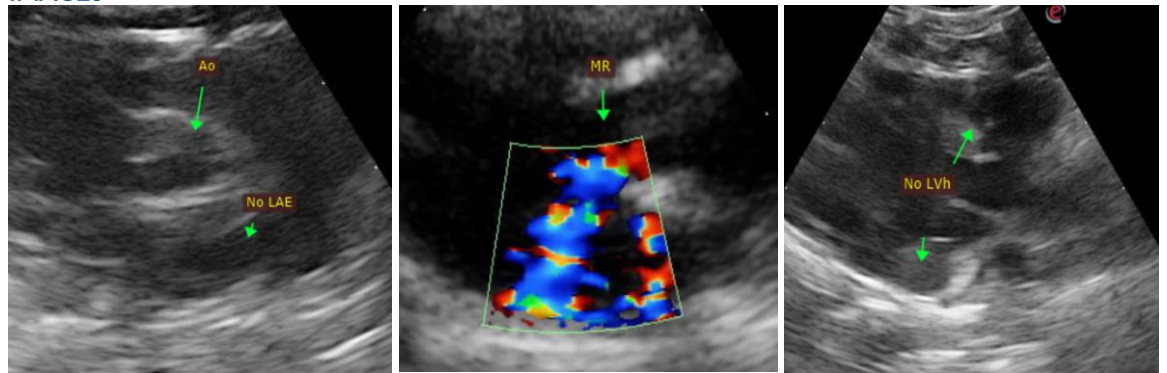
**AGE**

3 years

**WEIGHT**

10lbs

**IMAGES**



**INTERPRETED BY**

Maggie Machen  
Lamy, DVM, DACVIM  
(Cardiology)

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.

**IMAGING PERFORMED BY**

Rebekah Jakum, CVT  
ARDMS/RVT

Maggie Machen Lamy, DVM  
Diplomate of the American College of Veterinary Internal Medicine (Cardiology)

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