

**PATIENT PRESENTING CLINICAL SIGNS**

Norwood Abato

History: DCM

**SPECIES**

Canine

Medication: Pimobendan 5 BID, Lasix 12.5, spironolactone 25 BID, enalapril 10 BID, SP Cardiac Supplement, Vetriscience Cardiopro

**ULTRASONOGRAPHIC EXAMINATION OF THE HEART**

**BREED**

ACD

**SEX**

FS

**AGE**

7 years

**WEIGHT**

50 Pounds

CANINE	MR	TR	LA/AO	LA/AO	FS	EF	EPSS
<b>CARDIAC PARAMETERS</b>	<b>VMAX</b> (m/s)	<b>VMAX</b> (m/s)	(Boon method)	(Heart Base; Swe)	(%)	(%)	(cm)
<b>NORMAL PARAMETER</b>	4.5-5.5	<2.7	1.3	<1.6	28-40	40-100	<0.6
<b>PATIENT</b>	5.5	1.4	3.1	2.6	13	28	1.8
CANINE	HR	AV	PV	BODY WEIGHT	LA	LVIDd	LVIDs
<b>CARDIAC PARAMETERS</b>	(BPM)	<b>VMAX</b> (m/s)	<b>MAX</b> (m/s)	(kg)	2D short axis Base view (cm)	Avg; 2D and m-mode short axis (cm)	Avg; 2D and m-mode short axis (cm)
<b>NORMAL PARAMETER</b>	50-100	0.7-1.7	0.7-1.6	BELOW	BELOW	BELOW	BELOW
<b>PATIENT</b>	92	1.6	0.8		5.1	6.7	

**INTERPRETED BY**

R. McKenzie Daniel,  
DVM, DABVP  
(Canine and Feline)

**Cardiac Presentation**

The echocardiogram for this patient presented severe **left atrial size** expressed in 3 different LA measurement methods. Left atrial content was anechoic. No evidence of "smoke" or thrombotic activity was noted. The atrial septum was deviated owing to volume overload. The cranial and caudal **mitral** valve leaflets presented normal linear structure yet eccentric insufficiency was noted. The **left ventricle** demonstrated excessive volume (LVIDd measurement below). Ventricular function was severely subnormal expressed by the fractional shortening measurement listed below. Myocardium appeared subjectively thin typical of DCM. 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. Color doppler assessment of the tricuspid valve revealed tricuspid valve insufficiency. 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. The cranial **mediastinum and pericardial regions** were free of masses in the visible window.

**IMAGING PERFORMED BY**

Rebekah Jakum, CVT  
ARDMS/RVT

**HOSPITAL NAME**

Pottstown AWS

**REFERRING VET**

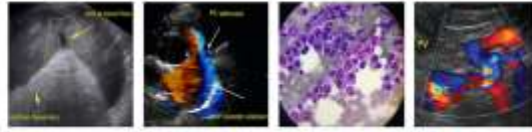
Dr. DiBuono

**INVOICE**

1156

**DATE**

10.12.2021



**PATIENT**

Norwood Abato

**ULTRASONOGRAPHIC FINDINGS**

- Progressive DCM with severe systolic dysfunction
- Severe left atrium enlargement
- MR / TR

**SPECIES**

Canine

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**BREED**

ACD

Unfortunately, the echocardiogram at this time is consistent with progressive previously diagnosed dilated cardiomyopathy, including severe systolic dysfunction and severe left heart volume overload. Mitral valve and tricuspid valve insufficiency are present, although the estimated pulmonary pressure gradient based on the tricuspid valve insufficiency was not consistent with concurrent clinical pulmonary hypertension.

**SEX**

FS

Given the cardiac presentation despite current medical protocol, end-stage cardiomyopathy and systolic dysfunction are suspected. TID Pimobendan at current dose is recommended, given the severely subnormal fractional shortening, while if evidence of congestion, an appropriate increase in Lasix/Spironolactone combination may be indicated. Continued monitoring of systemic blood pressure, ECG, as well as renal parameters are suggested.

**AGE**

7 years

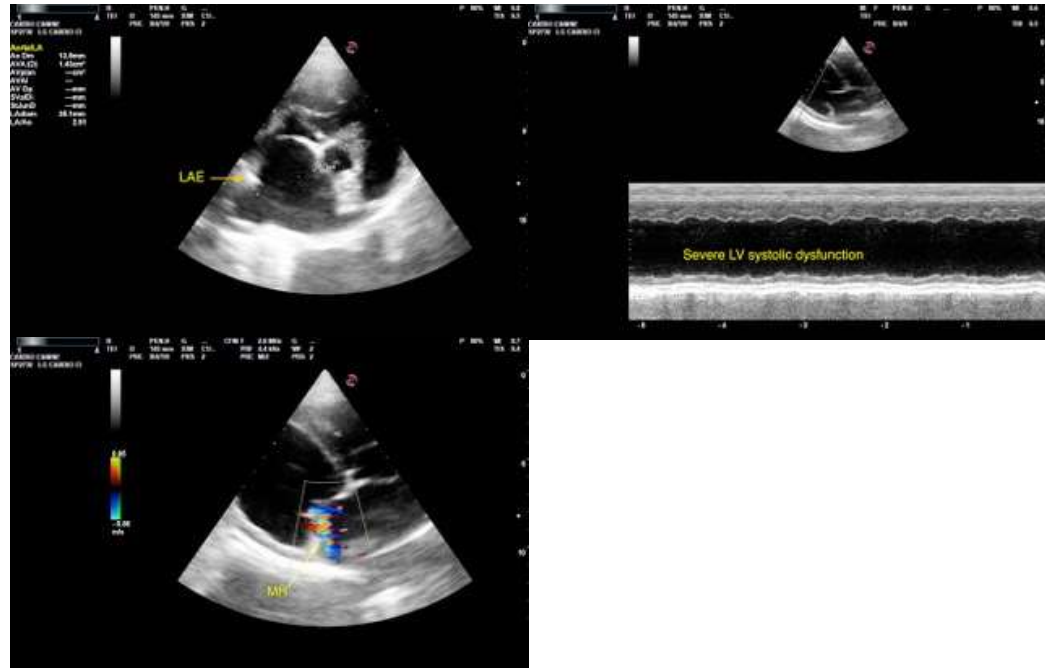
**WEIGHT**

50 Pounds

Unfortunately, an unfavorable long-term prognosis is indicated, although assessment of clinical response to TID Pimobendan is suggested. Recheck echocardiogram is suggested in 4-6 weeks, sooner if clinical signs consistent with continued cardiac decompensation are noted. This patient may be at risk for sudden death.

**INTERPRETED BY**

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DVM, DABVP  
(Canine and Feline)



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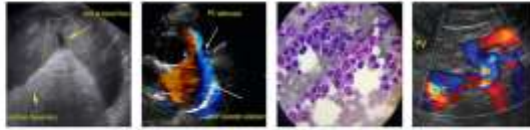
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Norwood Abato

**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.**

**SPECIES**

Canine

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.

**BREED**

ACD

**R. McKenzie Daniel, DVM, DABVP (Canine/Feline Practice)**  
[mac.daniel@sonopath.com](mailto:mac.daniel@sonopath.com)

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