



**PATIENT PRESENTING CLINICAL SIGNS**

Brutus Ciardella

History: Patient presented from boarding facility laterally recumbent, hyperthermic, and tachycardic. Initial temp 107 degrees, temp at time of ultrasound (10am) 105 degrees after cooling treatments and IV fluids. Heart rate 188, high blood pressure.

**SPECIES**

Canine

**ULTRASONOGRAPHIC EXAMINATION OF THE HEART**

**BREED**

Great Pyrenees

The **left atrium** was volume contracted. The cranial and caudal **mitral valve** leaflets presented normal linear structure, extension in systole, and union in diastole with normal kinesis. 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. **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. **Pulmonic** insufficiency was noted. 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. The patient was tachycardic.

**SEX**

Neutered male

**AGE**

7 years

**WEIGHT**

118 lbs

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

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			0.85	0.9	25	50	3.1
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	186	1.0	0.81	118 lbs	3.28 max		

**IMAGING  
PERFORMED BY**

Kelly Vazquez, CVT

**HOSPITAL NAME**

Westwood Regional  
VH

**REFERRING VET**

Dr. Curtis

**ULTRASONOGRAPHIC FINDINGS**

**INVOICE**

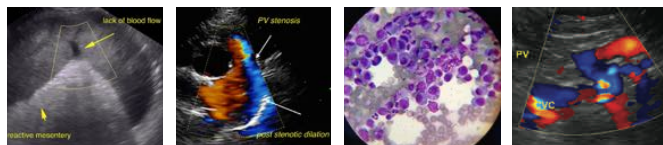
Tachycardic.

94119

Volume contracted heart. Suspect septic shock given the patient's history.

**DATE**

11/26/21



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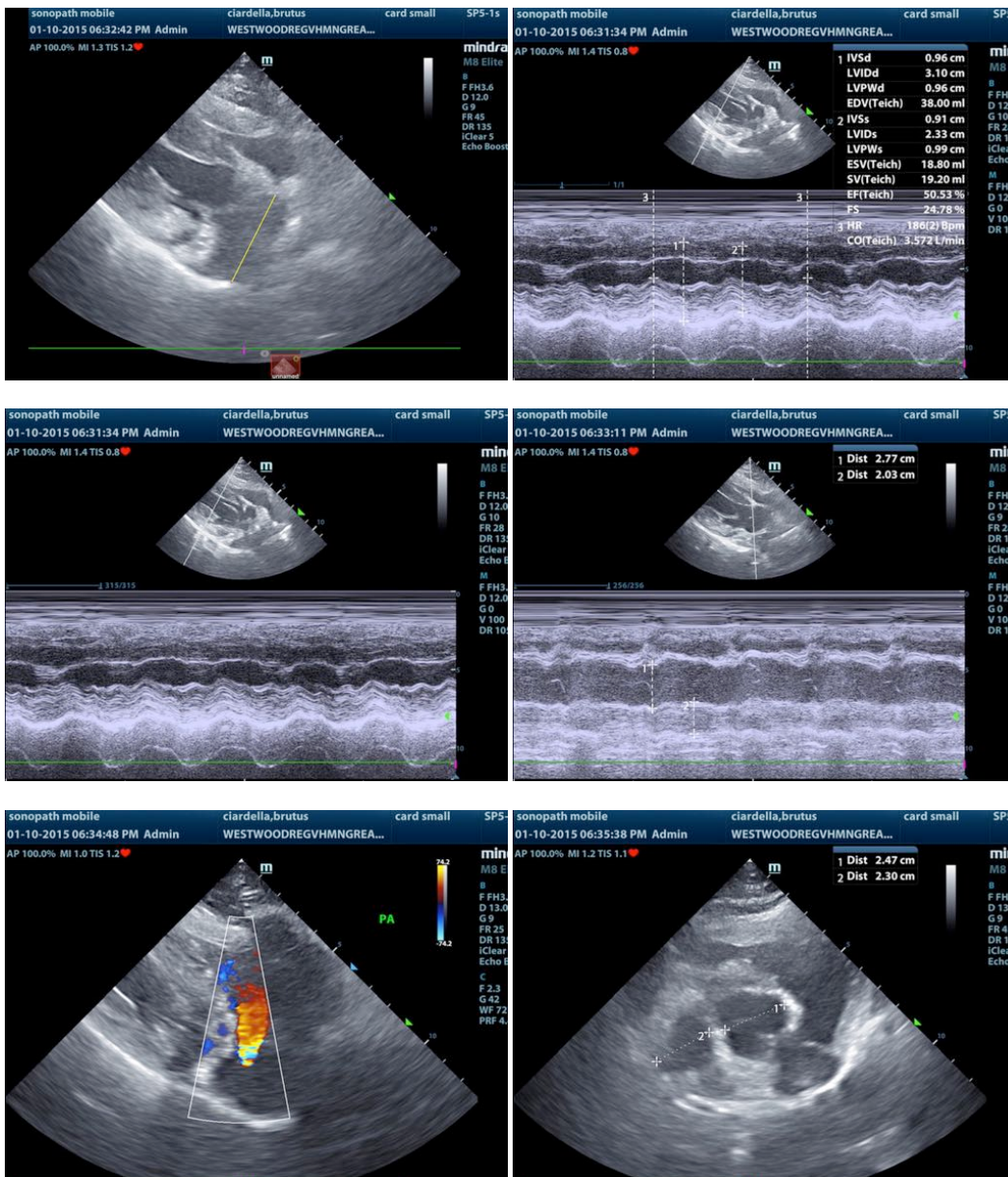
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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The patient is volume contracted. I strongly recommend plasma expanders in this patient such as Hetastarch. Plasma transfusion can also be considered. Aggressive IV antibiotics are warranted. Viral disease is a strong potential in this patient as well. Secondary degree shock is suspected depending upon clinical status.





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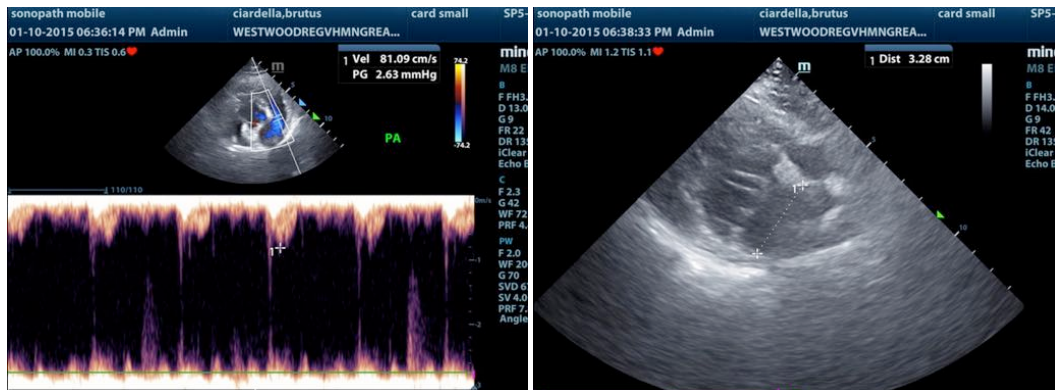
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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