



PATIENT

Dante Delect

SPECIES

Canine

BREED

Shih Tzu

SEX

Neutered Male

AGE

10 Years

WEIGHT

15.2 Pounds

INTERPRETED BY

Sara Brethel DVM,
DACVIM (Cardiology)

IMAGING PERFORMED BY

Dr. Gabriel Ferrer, DVM

HOSPITAL NAME

Pulse Pet Ultrasound
Services

REFERRING VET

Dr. Jose Gonzalez

INVOICE

35160

DATE

12/30/25

PRESENTING CLINICAL SIGNS

History: Presented as a referral for dual study, abdominal and echocardiogram to evaluate coughing, abdominal distention (ascites) and cardiomegaly. Pt presented to rDVM 2 months ago as pt developed a cough and on radiographs noticed cardiomegaly. While pt was on some medications the cough improved, but when discontinued the cough resumed. On December 24th noticed abdominal distention and coughing. Pt had ascites and an abdominocentesis was done and the fluid was clear color. Pt has been slightly inappetent.

Abnormal PE/Chem/CBC/UA Results: PE: Muffled heart sound, no HM, Abdominal breathing Bloodwork attached as supporting documents. Pericardiocentesis: Removed 52 mls of non-coagulated blood.

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO (M-Mode)	LA/AO (Heart Base; Swe)	FS (%)	EF (%)	EPSS (cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	Up to 1.6	28-40	40-100	<0.6
PATIENT	--	--	NM	1.25	--	--	NM
CANINE CARDIAC PARAMETERS	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT (kg)	LAD LA MAX 4 Chamber	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	--	1.41	0.97	6.9	1.0	1.5	--

Cardiac Presentation

The mitral valve leaflets are normal and there is no mitral regurgitation. There is no prolapse of the mitral valve leaflets. The left atrial size is normal. There is evidence of severe left ventricular underloading. There is normal right atrial size without evidence of tricuspid regurgitation. There is no prolapse of the tricuspid valve leaflets and no evidence of pulmonary hypertension on today's evaluation. The right ventricle subjectively appears normal in structure and function. The aortic and pulmonic valves have normal morphology and the corresponding outflow velocities are within normal limits. There is no evidence of pulmonic or aortic insufficiency. The aorta appears normal. The pulmonary artery and associated branches appear normal. There is no evidence of pleural effusion. There is severe pericardial effusion with evidence of cardiac tamponade. There is concern for a possible mass in the right atrioventricular groove.



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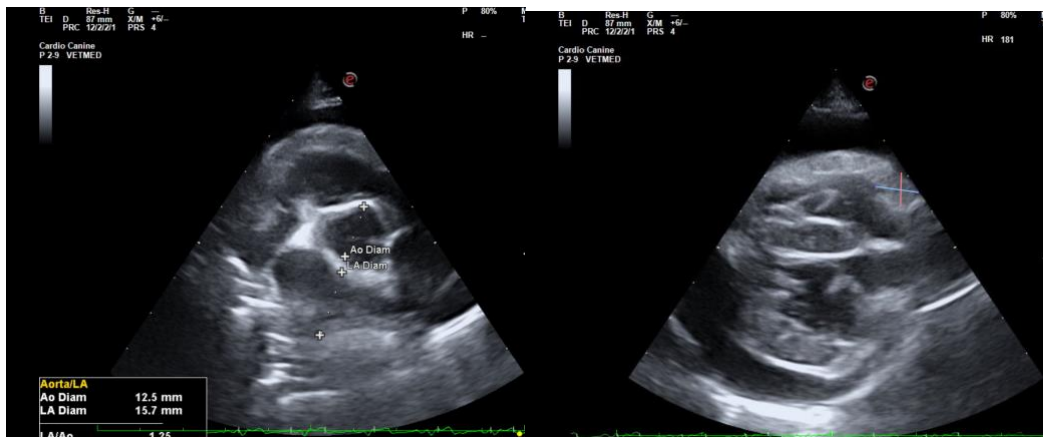
12/30/25

ULTRASONOGRAPHIC FINDINGS

- Severe pericardial effusion with cardiac tamponade
- Left ventricular underloading
- Possible mass within the right AV groove

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There's severe pericardial effusion with cardiac tamponade and collapse of the right side of the heart. In some images, on both the right and left sides, there is concern for a right auricular right atrial mass in the AV groove. Unfortunately, there is a lot of soft tissue superimposed in this region. An artifact is possible. The most common mass for this location is a condition like hemangiosarcoma. For definitive evaluation, a CT scan can be performed to further evaluate the presence of a mass. I would encourage a full body CT scan. Likely the ascites is secondary to the cardiac tamponade (the pericardial effusion). Can consider fluid analysis and cytology of the pericardial effusion, however, the types of tumors that develop around or in the heart do not often exfoliate well and often come back as hemorrhagic rather than obtaining a definitive diagnosis. I would recommend having the patient on Yunnan Baiyao indefinitely. If not moving forward with referral, a fluid scan is recommended in 3-5 days just to evaluate for any re-accumulation of pericardial effusion. Recheck echo in 1-2 months to monitor that region. If there is a mass present in the right AV groove, unfortunately, the patient's prognosis is guarded to grave. Even with idiopathic effusion, there is always the risk for re-effusion. Cardiac tamponade is a life-threatening emergency and an emergent pericardiocentesis would be needed.



The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. 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.



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