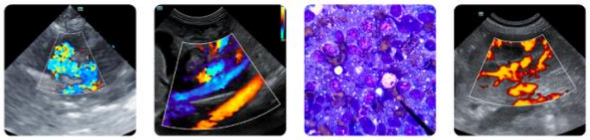


PATIENT

Max White Guerra

SPECIES

Canine

BREED

Miniature Schnauzer

SEX

Neutered Male

AGE

8 Years

WEIGHT

24 pounds

INTERPRETED BY

Bradley Harris, DVM, DACVECC, DACVIM (cardiology)

IMAGING PERFORMED BY

Dr. Gabriel Ferrer DVM

HOSPITAL NAME

Pulse Pet Ultrasound Services

REFERRING VET

Dra. Mayra Fonseca

INVOICE

12490

DATE

11/26/25

PRESENTING CLINICAL SIGNS

Presented as a referral for an echocardiogram to evaluate cardiomegaly and ascites. About 8 days ago O noticed that pt had abdominal distention and was having diarrhea with hematochezia. Pt was evaluated and noticed that pt had ascites as well. Pt had was neutered in Oct 2025 as pt had enlarged prostate and possible prostatitis. Wanted to further evaluate the heart as possible cause of ascites.

PE: abdominal distention, No obvious heart murmur ausculated. Radiograph, bloodwork, EKG and previous abdominal u/s attached as supporting document. BP: Avg of 5: Right lateral Left forelimb #2 cuff Syst: 132, Dias: 90, MAP: 100 HT: 137 Abdominocentesis was performed and remove 475mls of mod transudate blood-tinged fluid

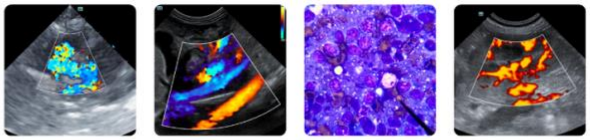
ULTRASONOGRAPHIC EXAMINATION OF THE HEART

CANINE CARDIAC PARAMETERS	BW	HR BPM	LAD 4 ch Long	RAD 4 ch Long	La/Ao Heart Base	LVIDd	LVIDs
NORMAL PARAMETER		50-100			<1.6		
PATIENT	10.92	140	1.65	2.82	1.26	1.90	0.59
CANINE CARDIAC PARAMETERS	**FS**	**EPSS**	**PV V MAX (m/s)**	**AV V Max (m/sec)**	**MR Vmax**	**TR Vmax**	**RPA distensibility (normal >30%)**
NORMAL PARAMETER	28-40	<0.6	0.7-1.6	0.7-1.7	4.5-5.5	< 2.7	
PATIENT	69	NM	0.57	0.80	4.9	4.3	14

Cardiac Presentation

The left atrium normal in dimension. The left ventricle is normal in dimension, with normal systolic function. The right atrium and ventricle are severely dilated with right ventricular hypertrophy and septal flattening. The mitral valve is thickened and redundant consistent with myxomatous changes, and there is no significant prolapse. There is evidence of mild mitral regurgitation. The tricuspid valve leaflets are minimally thickened with moderate tricuspid regurgitation and evidence of moderate to severe pulmonary hypertension. The left ventricular outflow tract demonstrated normal laminar flow and the visible aorta is unremarkable. The right ventricular outflow tract assessment revealed normal laminar flow, and a dilated main pulmonary artery diameter with reduced distensibility. There is mild pulmonic valve insufficiency. There is no visible pericardial or pleural effusion, but moderate free peritoneal fluid noted. The cardiac chambers, pericardial and visible extra-cardiac regions were free of masses, spontaneous echo contrast, or thrombi.

ULTRASONOGRAPHIC FINDINGS



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- These findings identify significant pulmonary hypertension in conjunction with degenerative mitral disease. The lack of chamber enlargement is consistent with ACVIM stage B1, making cor pulmonale secondary to primary pulmonary disease/PH the likely cause for morbidity. Pulmonary hypertension in dogs is most commonly secondary to primary respiratory disease (chronic bronchitis, pulmonary fibrosis, or other forms of pulmonary interstitial disease). Pulmonary hypertension can also develop in dogs with severe heartworm disease or secondary to pulmonary thromboembolism (PTE). Less commonly, pulmonary hypertension is identified in dogs as an idiopathic condition. The degree of PH has resulted in right sided cardiac enlargement (cor pulmonale), and subsequent congestive heart failure. The clinical signs are likely attributable to this condition.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Therapy for CHF is recommended, and should include Lasix (2 mg/kg BID), enalapril (0.5 mg/kg BID), and Vetmedin (0.25-0.35 mg/kg BID), sildenafil (2 mg/kg BID), and spironolactone (1-2 mg/kg BID). Evaluation for primary pulmonary disease with thoracic radiographs, a heartworm test, and bronchoscopy are indicated. The merits of an airway scope/wash should be discussed with the owner, especially prior to any steroid use. A repeat echo is indicated in 3-6 months.

Anesthesia considerations:
Anesthesia should be avoided if possible. If anesthesia is necessary, then alpha-2 agonists, ketamine, and Telazol should be avoided. If an ACE inhibitor (enalapril, benazepril) or spironolactone is being given, it should not be administered on the morning of general anesthesia. Other cardiac medications should be administered per the normal dosing schedule. Fluid therapy during anesthesia should be considered at a reduced rate (5 ml/kg/hour) if possible (i.e., if not hypotensive). A shorter anesthetic duration will reduce the risk of complications. Pre-oxygenation is mandatory. Premedication with an opioid (e.g., butorphanol, hydromorphone, oxymorphone) with or without a benzodiazepine is generally the safest protocol. An induction agent such as Propofol, alfaxalone, or diazepam/etomidate can be used to effect. Maintenance of anesthesia with isoflurane or sevoflurane is reasonable.

Diet:
A high-quality food from Hills, Royal Canin, Science Diet, Eukanuba, Iams, or Purina that is highly palatable with adequate protein and calories for maintaining optimal body condition with mild dietary sodium restriction (<100 mg/100 kcal) is recommended. Consider omega-3 fatty acid supplementation. Ensure the patient is not currently receiving a boutique, exotic, or grain-free diet.

Activity:
Moderate physical activity (meandering walks, exploring the backyard, playing with toys inside, getting excited when family gets home, etc.) is encouraged, but periods of strenuous aerobic activity (jogging, strenuous outdoor ball play, prolonged play at the dog park, etc.) should be avoided, especially during periods of high heat (> 80 F) and humidity. Dogs with heart disease tend to tolerate cool and cold temperatures much better than high temperatures. Avoid sudden increases in activity (e.g. 2 block walks during the week but 2 mile walks followed by 30 minutes at the dog park on the weekends) as this may be difficult for the cardiovascular system to deal with.

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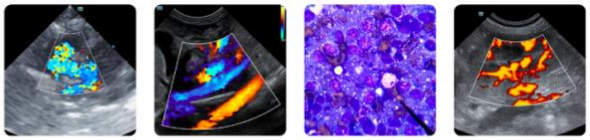

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Educational Teleconsultation Services™

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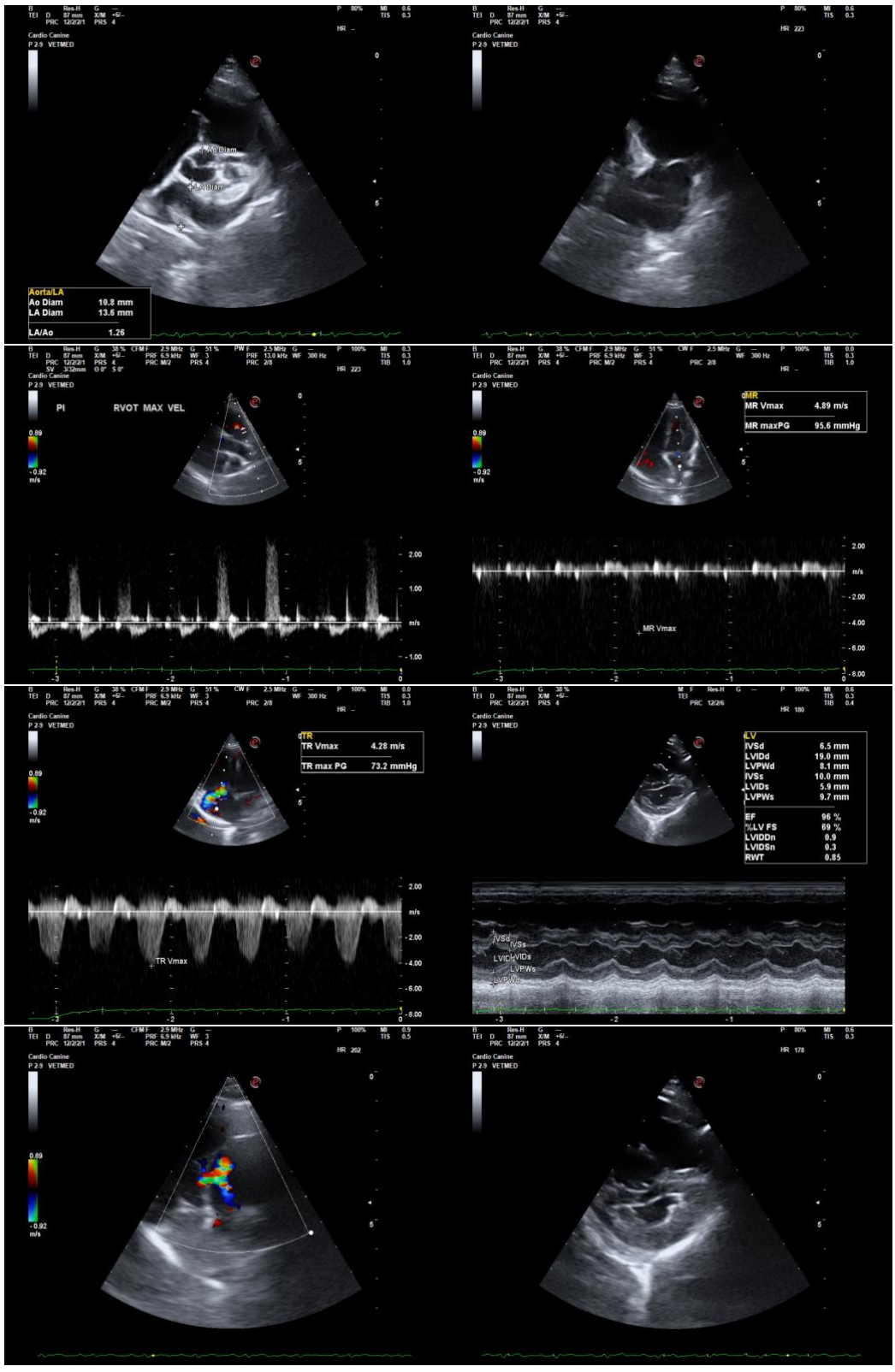

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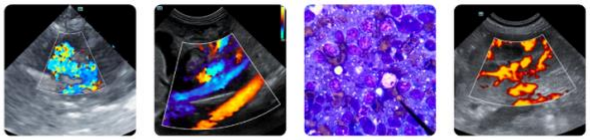

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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Bradley Harris, DVM, DACVECC, DACVIM (cardiology)

info@SonoPath.com