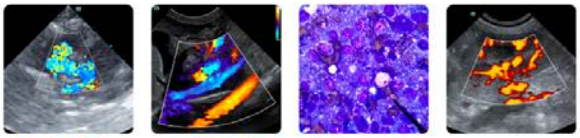


PATIENT

Gizmo Purchase

SPECIES

Canine

BREED

Chihuahua

SEX

Neutered Male

AGE

9 Years

WEIGHT

~6 kg

INTERPRETED BY

Brad Harris, DVM, DACVECC, Residency trained in cardiology

IMAGING PERFORMED BY

Amanda Stewart

HOSPITAL NAME

Aldershot Animal Hospital

REFERRING VET

Dr. Wallace

INVOICE

72536

DATE

12/11/25

PRESENTING CLINICAL SIGNS

Grade 4-5/6 heart murmur Coughing Current Medications Furosemide and benazepril

Abnormal PE/Chem/CBC/UA Results: Primary Question to Be Answered in This Exam Staging of heart disease ECG attached

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

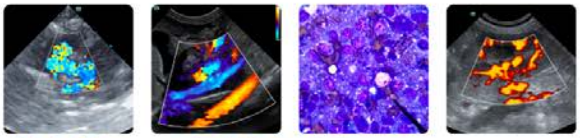
CANINE CARDIAC PARAMETERS	BW	HR BPM	LAD 4 ch Long	RAD 4 ch Long	La/Ao Heart Base	LVIDd	LVIDs
NORMAL PARAMETER		50-100			<1.6		
PATIENT	6.0	150	3.16	1.91	1.75	2.18	1.43
CANINE CARDIAC PARAMETERS	**FS**	**EPSS**	**PV V MAX (m/s)**	**AV V Max (m/sec)**	**MR Vmax**	**TR Vmax**	**RPA distensibility (normal >30%)**
NORMAL PARAMETER	28-40	<0.6	0.7-1.6	0.7-1.7	4.5-5.5	< 2.7	
PATIENT	34	0.1	1.1	1.2	6.3	3.0	33

Cardiac Presentation

The left atrium is mild to moderately enlarged. The left ventricle is normal in dimension, with normal systolic function. The right atrium and ventricle are subjectively normal in dimension and systolic function. The mitral valve is thickened and redundant consistent with myxomatous changes, and there is mild prolapse. There is evidence of moderate mitral regurgitation. The tricuspid valve leaflets are thickened and redundant with mild tricuspid regurgitation and no evidence of 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 appropriate diameter and distensibility. There is no evidence of semilunar valve insufficiency. There is no visible pericardial, pleural, or free peritoneal fluid noted. The cardiac chambers, pericardial and visible extra-cardiac regions were free of masses, spontaneous echo contrast, or thrombi.

ECG:

There is a six-lead ECG available for review. The underlying rhythm is regular at an average rate of 150bpm. The rhythm appears to be sinus in origin (PQ 80ms) with narrow QRS complexes (<70ms). There is no atrial or ventricular ectopy and no conduction delay or block identified. This is most consistent with a normal sinus rhythm.



SonoPath www.thefocalzone.com info@thefocalzone.com 289.808.2608

PATIENT

Gizmo Purchase

SPECIES

Canine

BREED

Chihuahua

SEX

Neutered Male

AGE

9 Years

WEIGHT

~6 kg

INTERPRETED BY

Brad Harris, DVM, DACVECC, Residency trained in cardiology

IMAGING PERFORMED BY

Amanda Stewart

HOSPITAL NAME

Aldershot Animal Hospital

REFERRING VET

Dr. Wallace

INVOICE

72536

DATE

12/11/25

ULTRASONOGRAPHIC FINDINGS

- These findings are consistent with degenerative mitral valve disease with significant hemodynamic effects. Given the degree of chamber enlargement, congestive heart failure is a possible explanation for any clinical/radiographic signs, consistent with ACVIM Stage C.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Continued therapy for CHF is recommended, and should include Lasix (2mg/kg BID), enalapril (0.5mg/kg BID assuming normotension and lack of renal insult), and Vetmedin (.25-.35mg/kg BID). A repeat chest X-rays, BP, and chemistry should be performed now for a baseline, and again in 1-2 weeks. A repeat echo is indicated in 3 months. Owners should monitor resting respiratory rate at home. Values above 30 breaths/minute or an increase in respiratory rate 10% above baseline should prompt veterinary re-evaluation.

Anesthesia considerations:
Anesthesia should be avoided until manifestations of congestive heart failure (edema/effusion/respiratory distress) have resolved. Following that time, if anesthesia is necessary, then alpha-2 agonists, ketamine, high dose acepromazine, 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. Anesthetic IV fluid use should be limited to < 3 ml/kg/hr and, if IV fluid therapy is administered during the procedure, a 1 mg/kg dose of IM Lasix should be administered when the patient is awake and standing in recovery. A shorter anesthetic duration will reduce the risk of complications. Pre-oxygenation is advised. Premedication with an opioid (i.e., 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. Dobutamine (2.5-10 µg/kg/min as a CRI, starting at 2.5 µg/kg/min and increasing the dosage incrementally) may be used in lieu of fluid boluses to augment systemic blood pressure.

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. Avoid any boutique, exotic, or grain-free diets.

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.

PATIENT

Gizmo Purchase

SPECIES

Canine

BREED

Chihuahua

SEX

Neutered Male

AGE

9 Years

WEIGHT

~6 kg

INTERPRETED BY

Brad Harris, DVM, DACVECC, Residency trained in cardiology

IMAGING PERFORMED BY

Amanda Stewart

HOSPITAL NAME

Aldershot Animal Hospital

REFERRING VET

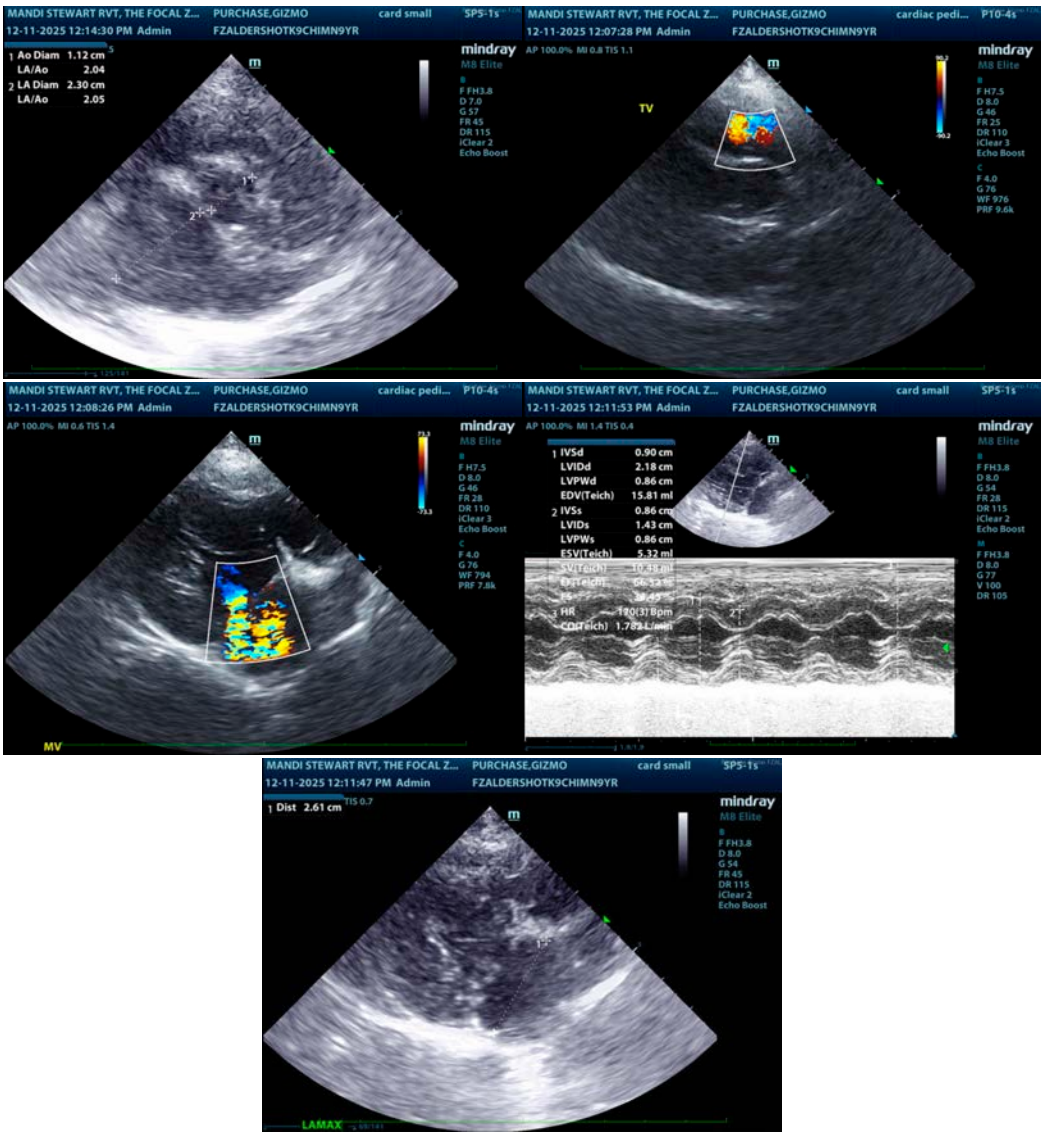
Dr. Wallace

INVOICE

72536

DATE

12/11/25



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.

Brad Harris, DVM, DACVECC, Residency trained in cardiology

info@SonoPath.com