



## PATIENT

Jameson Bianchi

## SPECIES

Canine

## BREED

Cavalier King Charles  
Spaniel

## SEX

Neutered Male

## AGE

9 Years 3 Months

## WEIGHT

28.8 pounds

## INTERPRETED BY

Bradley Harris, DVM,  
DACVECC, DACVIM  
(cardiology)

## IMAGING PERFORMED BY

Dr. Grahan Sager-  
Gellerman DVM

## HOSPITAL NAME

Back Bay Veterinary  
Clinic

## REFERRING VET

Dr. Ariana Ferraro  
DVM

## INVOICE

13746

## DATE

02/13/26

## PRESENTING CLINICAL SIGNS

- To evaluate the following condition: Stage C MMVD
- Case Summary: 9 year old king Charles cavalier with history of MMVC late B2 treated with enalapril, Vetmedin, spironolactone (see doses below). Recently had increased coughing so went to local ER where CXR revealed early CHF. He was started on Lasix on 1/23/26 (2 mg/kg PO q 12 h).
- Current Medications (Name, Dose, Frequency): enalapril 5 mg 1 tablet BID, Vetmedin 3.75 mg BID, spironolactone 1/2 tab BID, Furosemide 20 mg BID, Fish oil 1 cap/10 lbs

Abnormal PE/Chem/CBC/UA Results: 6/6/25: ECHO 1/23/26 local ER CXR: Findings: The cardiac silhouette is enlarged and measures over 4 intercostal spaces wide. There is moderate enlargement of the left atrium. The cranial pulmonary vein is larger than the corresponding artery. There is an increased interstitial infiltrate noted within the caudal lung fields. There is mild left atrial enlargement identified. Assessment: Cardiomegaly consistent with chronic valvular disease with evidence of venous congestion and infiltrate in the lungs typical of left-sided congestive heart failure. Senior wellness labs 1/29/26 CBC Bands 0.711 k/uL, neutrophils 5.3 k/uL (wnl) Chem: Creat 1.0 mg/dl, BUN 15 mg/dL, K 3.8 mmol/L, Cl 104 mmol/L

## 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	13.09	130	4.4	1.95	1.9	4.48	2.33
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	48	0.5	1.4	2.2	6.0	2.8	NM

## Cardiac Presentation

The left atrium is moderately enlarged. The left ventricle is moderately enlarged, with normal systolic function. The right atrium and ventricle are normal in dimension, with normal systolic function. The anterior and posterior mitral valve leaflets are thickened and redundant consistent with myxomatous changes, and there is moderate prolapse. There is severe mitral regurgitation identified. The tricuspid valve leaflets are thickened and redundant, with mild to moderate tricuspid regurgitation and no evidence of pulmonary hypertension. The left ventricular outflow tract demonstrated normal laminar



## PATIENT

Jameson Bianchi

## SPECIES

Canine

## BREED

Cavalier King Charles  
Spaniel

## SEX

Neutered Male

## AGE

9 Years 3 Months

## WEIGHT

28.8 pounds

## INTERPRETED BY

Bradley Harris, DVM,  
DACVECC, DACVIM  
(cardiology)

## IMAGING PERFORMED BY

Dr. Grahan Sager-  
Gellerman DVM

## HOSPITAL NAME

Back Bay Veterinary  
Clinic

## REFERRING VET

Dr. Ariana Ferraro  
DVM

## INVOICE

13746

## DATE

02/13/26

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 pulmonic and moderate aortic valve insufficiency identified. There is no visible pericardial, pleural, or free peritoneal fluid documented. No evidence of hepatic venous congestion is noted. The cardiac chambers, pericardial and visible extra-cardiac regions were free of masses, spontaneous echo contrast, or thrombi.

## ULTRASONOGRAPHIC FINDINGS

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

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Continued therapy for CHF is recommended, with Lasix (2mg/kg BID), enalapril (0.5mg/kg BID assuming normotension and lack of renal insult), Vetmedin (.25-.35mg/kg BID), and spironolactone (1-2mg/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  $\mu$ g/kg/min as a CRI, starting at 2.5  $\mu$ g/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



**PATIENT**

Jameson Bianchi

**SPECIES**

Canine

**BREED**

Cavalier King Charles  
Spaniel

**SEX**

Neutered Male

**AGE**

9 Years 3 Months

**WEIGHT**

28.8 pounds

**INTERPRETED BY**

Bradley Harris, DVM,  
DACVECC, DACVIM  
(cardiology)

**IMAGING  
PERFORMED BY**

Dr. Grahan Sager-  
Gellerman DVM

**HOSPITAL NAME**

Back Bay Veterinary  
Clinic

**REFERRING VET**

Dr. Ariana Ferraro  
DVM

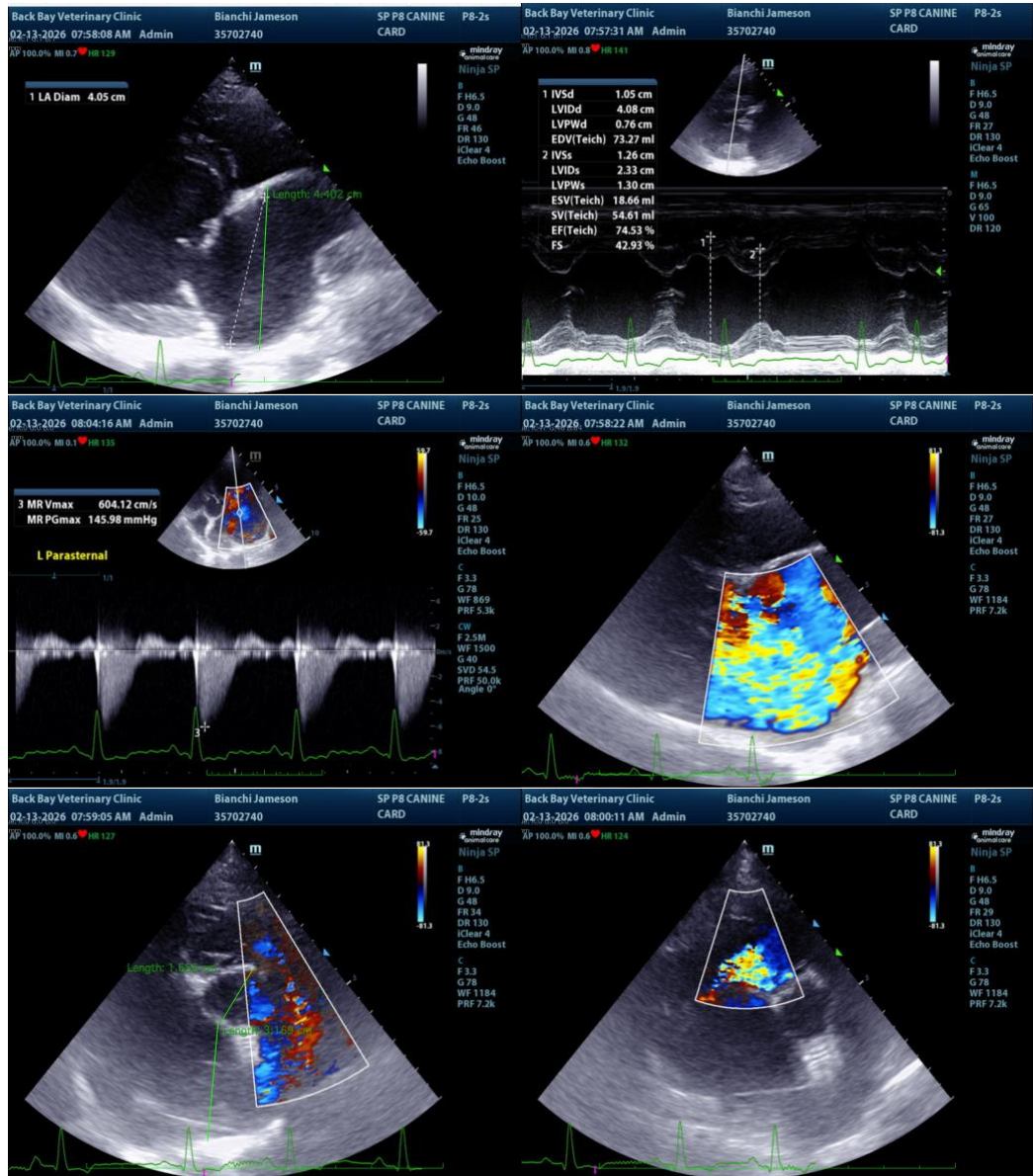
**INVOICE**

13746

**DATE**

02/13/26

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.



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.



## PATIENT

Bradley Harris, DVM, DACVECC, DACVIM (cardiology)

Jameson Bianchi

[info@SonoPath.com](mailto:info@SonoPath.com)

## SPECIES

Canine

## BREED

Cavalier King Charles  
Spaniel

## SEX

Neutered Male

## AGE

9 Years 3 Months

## WEIGHT

28.8 pounds

## INTERPRETED BY

Bradley Harris, DVM,  
DACVECC, DACVIM  
(cardiology)

## IMAGING PERFORMED BY

Dr. Grahan Sager-  
Gellerman DVM

## HOSPITAL NAME

Back Bay Veterinary  
Clinic

## REFERRING VET

Dr. Ariana Ferraro  
DVM

## INVOICE

13746

## DATE

02/13/26