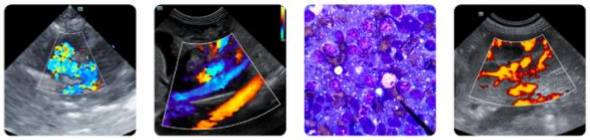


PATIENT

Jack CHS

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

1 Year

WEIGHT

4 kg

INTERPRETED BY

Bradley Harris, DVM, DACVECC, DACVIM (cardiology)

IMAGING PERFORMED BY

Dr. Sarah Barthelemy

HOSPITAL NAME

Calgary Humane Society

REFERRING VET

Calgary Humane Society

INVOICE

16573

DATE

05/28/26

PRESENTING CLINICAL SIGNS

Grade 5/6 systolic murmur

Cardiomegaly on radiographs with normal pulmonary vasculature

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

FELINE CARDIAC PARAMETERS	BODY WEIGHT (kg)	HR (BPM)	IVSd (cm)	LVIDd (cm)	LVWd (cm)	FS (%)	EF (%)
NORMAL PARAMETER	------	150-240	0.3-0.6	1.0-2.1	0.25-0.6	35-67	80-100
PATIENT	4	150	0.37	2.12	0.37	49	83

FELINE CARDIAC PARAMETERS	LA/AO (M-mode)	LA/AO HEART BASE (Sisson)	LAD LA MAX 4 Chamber	LVOT VEL. (m/s)	RVOT VEL. (m/s)	IVRT (m/)
NORMAL PARAMETER	<1.5	1.6	0.7-1.7	<1.6	<1.3	40-60
PATIENT	1.76	1.89	1.75	1.1	1.1	0.88

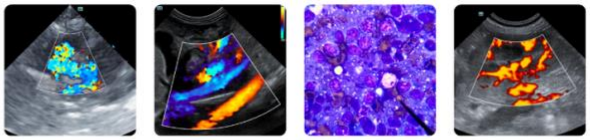
Adapted from June Boon,Veterinary Echocardiography,1998
Sisson D et al. JVIM 1991; 5: 232, Jacobs et al. Am J Vet Res 1985; 46:1705

Cardiac Presentation

The left atrium is mild to moderately enlarged. There are no distinct left atrial thrombi/clots or spontaneous echo contrast appreciated. The left ventricle is moderately dilated with normal wall thickness, and no evidence of restriction. Left ventricular systolic function is normal, with adequate contractility. There is dropout in the perimembranous intraventricular septum with high velocity left to right flow, consistent with a ventricular septal defect. The right atrium and ventricle are subjectively normal in dimension and systolic function. The anterior and posterior mitral and tricuspid valve leaflets presented normal linear structure, extension in systole, and union in diastole with trace regurgitation. There is no evidence of systolic anterior mitral motion documented. The left ventricular outflow tract demonstrated normal laminar flow and subjective structural valvular integrity. The visible aorta is unremarkable. Pulmonary outflow tract assessment revealed normal valve structure, laminar flow, and appropriate diameter and distensibility. There is evidence of mild to moderate aortic valve insufficiency, but no pulmonary hypertension is documented. There is no visible pericardial, pleural, or free peritoneal fluid noted.

ULTRASONOGRAPHIC FINDINGS

These findings identify a large perimembranous ventricular septal defect with a left to right shunt, resulting in left atrial and ventricular dilation. The chamber dilation suggests a hemodynamically significant shunt.



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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Therapy with Vetmedin (0.25-0.35mg/kg BID) is reasonable at this time. Enalapril/benazepril (0.5mg/kg q24) can also be considered, pending BP and kidney function. If an ACEi is started, a recheck chemistry panel and blood pressure should be performed 1-2 weeks after starting therapy. Additionally, Plavix/clopidogrel should be initiated as an anti-thrombotic (1/4 of a 75 mg tablet, or 18.75 mg PO q 24 h). Due to the bitter taste of this medication, it may be best to place it in an empty gelatin capsule or use products such as a Pill Pocket. Referral to a veterinary cardiologist is recommended for long term management. A repeat echocardiogram is recommended in 6 months.

Anesthesia considerations:

While there is no CHF present, there is likely an increased anesthetic risk which must be considered prior to any anesthetic procedure. 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. Fluid therapy during anesthesia should be considered at a reduced rate (e.g., 2-5 ml/kg/hour) if possible (i.e., if not hypotensive). 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.

Diet:

No special considerations are necessary. Any high-quality food from Hills, Royal Canin, Science Diet, Eukanuba, Iams, or Purina is reasonable.

Activity:

Avoid strenuous activity.

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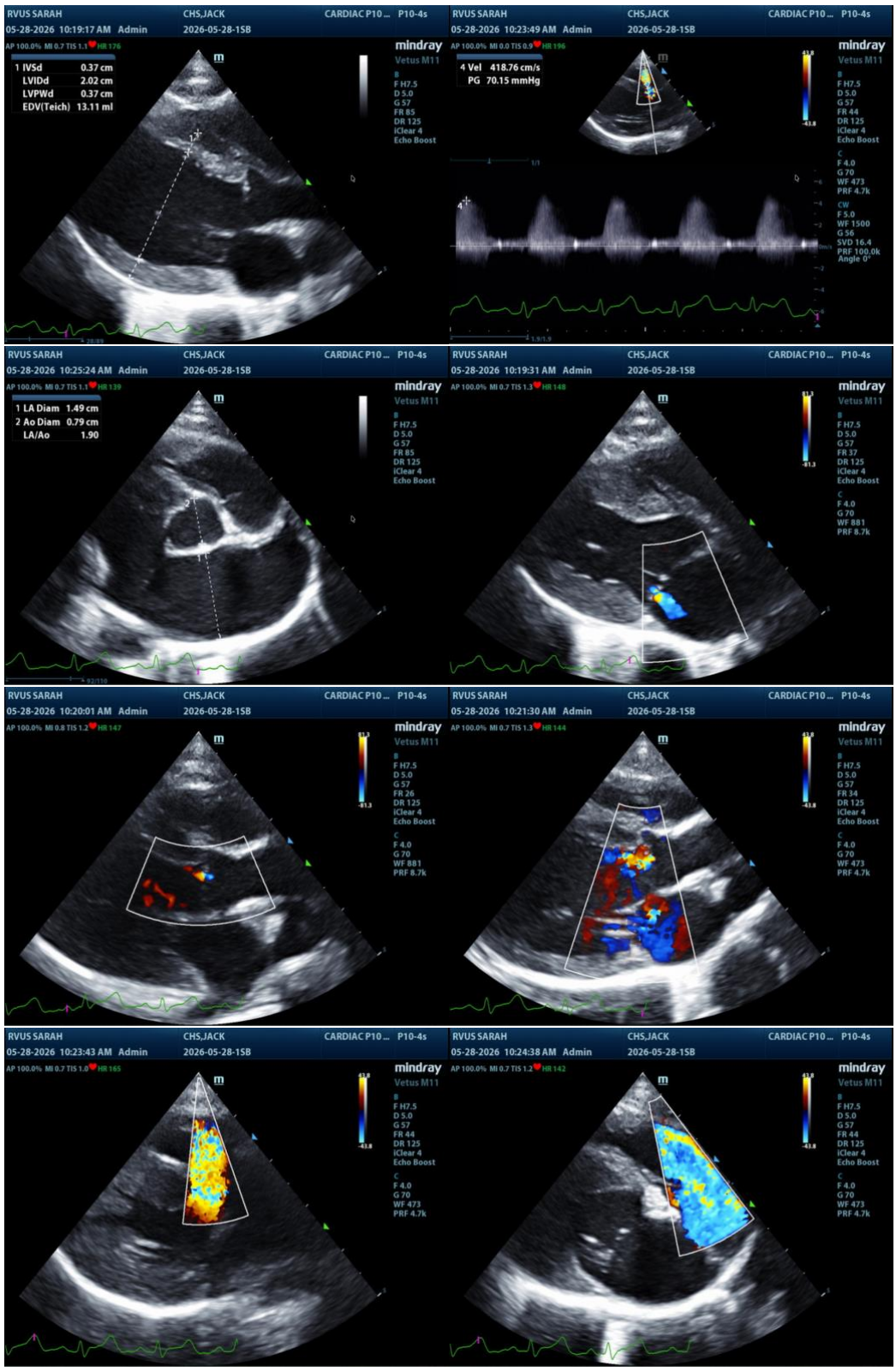

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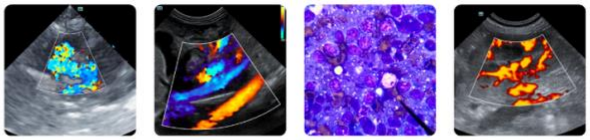

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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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