

PATIENT

Brook 89515A

SPECIES

Feline

BREED

DSH

SEX

Intact Female

AGE

12 Weeks

WEIGHT

2.2 lbs

PRESENTING CLINICAL SIGNS

History: 2/6 parasternal systolic murmur Normal proBNP Sedated with Torb, ketamine, midaz.

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	1.0	NM	0.43	NM	0.43	NM	NM
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	1.38	--	--		--	~3.0	NM

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

INTERPRETED BY

Sara Brethel, DVM,
 DACVIM (Cardiology)

IMAGING PERFORMED BY

Andrea Nicastro, DVM,
 DACVIM

HOSPITAL NAME

Charleston AS

REFERRING VET

Dr. Lucy Fuller

INVOICE

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DATE

1/15/26

Cardiac Presentation

The mitral valve leaflets are normal and there is no mitral regurgitation. The left atrial size is normal. There is no evidence of systolic anterior motion of the mitral valve and no evidence of a left ventricular outflow tract obstruction. Left ventricular systolic and diastolic function is within normal limits. There is no evidence of left ventricular concentric hypertrophy. 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 the images provided. The right ventricle appears normal in structure and function subjectively. The aortic and pulmonic valves appear to have normal morphology. There is concern for a possible increase in pulmonic outflow velocities, however, it is difficult to determine if this is coming from the pulmonic valve. There is no evidence of pulmonic or aortic insufficiency. The aorta, pulmonary artery, and associated branches appear normal. There is echo drop out within the interatrial septum and there is a portion that is concerning for a possible ventricular septal defect. There is no evidence of pleural effusion, pericardial effusion, or intracardiac masses.

ULTRASONOGRAPHIC FINDINGS

- Potential increased pulmonic outflow velocities
- Echo drop out within interatrial septum
- Possible ventricular septal defect

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS



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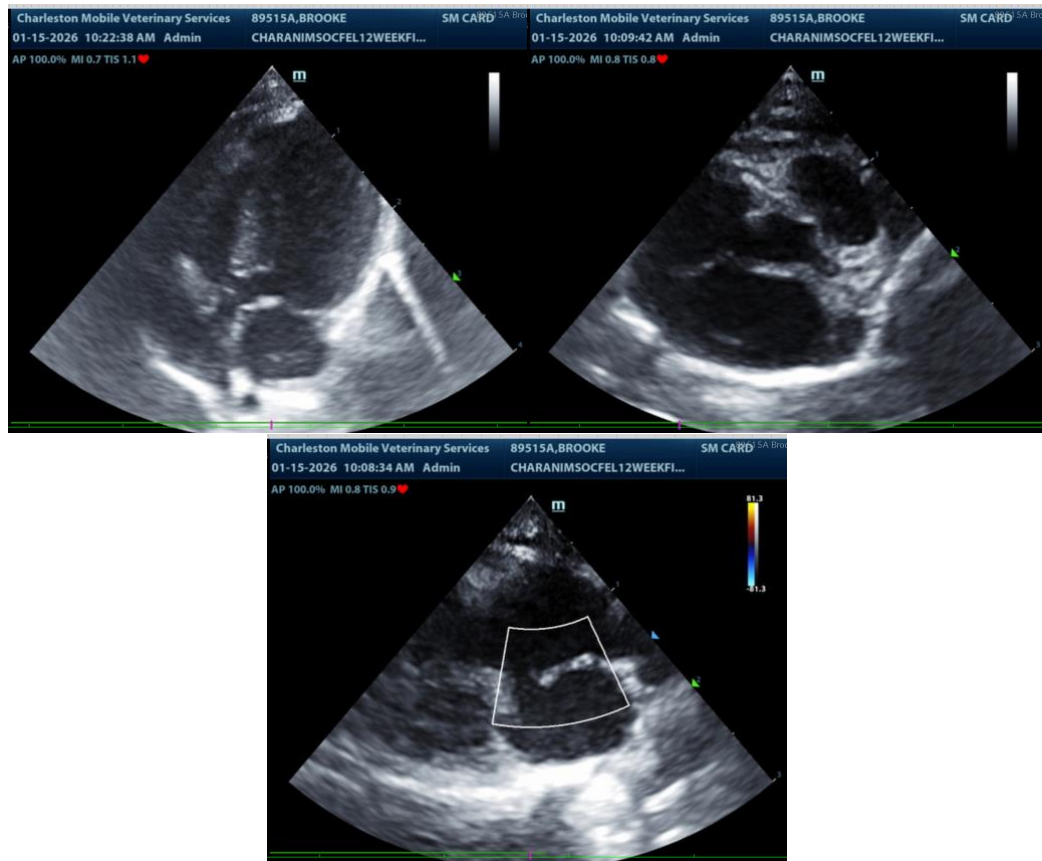
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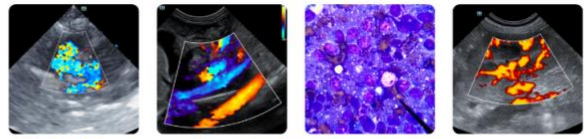
Given the patient's size, it is difficult to ascertain a direct cause of the murmur. There are several findings that are concerning for possible congenital defects, such as elevated pulmonic outflow velocities, possible ventricular septal defect and echo drop out within the interatrial septum. I would consider referral for this patient to be evaluated by a veterinary cardiologist to further investigate these abnormalities and differentiate what is potentially age-related findings versus true congenital defects. If not moving forward with referral, a recheck echo is recommended in 6 months, sooner if the patient develops cardiovascular clinical signs. No cardiac therapies are recommended at this time.

If the patient requires anesthesia, standard perioperative fluid rates should be well-tolerated. Medications like dexmedetomidine and other alpha 2 agonists are best avoided. Ketamine is also best avoided. Anticholinergics can be used in the case of a clinically significant bradyarrhythmia (i.e., bradycardia with concurrent hypotension). If the patient is on an ACEi, recommend not giving this therapy the day of anesthesia.



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



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can be of any further assistance please contact me.

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