



PATIENT

Pumas Shadow Estrada

SPECIES

Feline

BREED

DSH

SEX

Spayed Female

AGE

7 Years

WEIGHT

9.14 pounds

INTERPRETED BY

Sara Brethel DVM,
DACVIM (Cardiology)

IMAGING PERFORMED BY

Dr. Andrea Nason

HOSPITAL NAME

Caravan Vet

REFERRING VET

Dr. Andrea Nason

INVOICE

15529

DATE

04/27/26

PRESENTING CLINICAL SIGNS

Pumas presented for a routine wellness exam in March. There was no murmur on exam. Screening proBNP was 751. Cardiac work up to assess for underlying heart disease, if cardiac medications are warranted, if she could be a Felcycin CA1 patient AND anesthetic safety - she likely has a ear canal tumor that needs removal.

Abnormal PE/Chem/CBC/UA Results: BNP 751 T4 1.9 Crea 1.1 BUN 23 blood pressure 130 systolic

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	4.15	NM	0.41	1.37	0.48	--	--
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)	LVIDs (m/s)
NORMAL PARAMETER	<1.5	1.6	0.7-1.7		<1.6	<1.3	
PATIENT	NM	1.5	1.3		--	--	--
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 mitral valve leaflets are normal and there is no mitral regurgitation. The left atrial size is at the upper limits of normal to mildly increased. 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 have normal morphology. The corresponding outflow velocities cannot be assessed. There is no evidence of pulmonic or aortic insufficiency. The aorta appears normal. The pulmonary artery and associated branches appear normal. There is no evidence of pleural effusion, pericardial effusion, or intracardiac masses.

ECG

Normal sinus rhythm.

Chest Radiographs



PATIENT

Pumas Shadow Estrada

SPECIES

Feline

BREED

DSH

SEX

Spayed Female

AGE

7 Years

WEIGHT

9.14 pounds

INTERPRETED BY

Sara Brethel DVM,
DACVIM (Cardiology)

IMAGING PERFORMED BY

Dr. Andrea Nason

HOSPITAL NAME

Caravan Vet

REFERRING VET

Dr. Andrea Nason

INVOICE

15529

DATE

04/27/26

The cardiac silhouette appears mildly enlarged. There is a diffuse bronchiolar pulmonary pattern present. There is no evidence of cardiogenic pulmonary edema or pleural effusion.

ULTRASONOGRAPHIC FINDINGS

- Left atrial size at the upper limits of normal to mildly increased.
- Normal sinus rhythm.
- Mild left atrial enlargement on chest radiographs.
- Bronchiolar pulmonary pattern on chest radiographs.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The left atrium is at the upper limits of normal to mildly increased. There is no concentric hypertrophy of the left ventricle, therefore the patient is not a candidate for Felycin CA1. As far as underlying cardiac disease at this point in time and the absence of concentric hypertrophy and the mild changes to left atrium, a non-specified cardiomyopathy cannot be ruled out.

Judicious perioperative fluids are recommended due to the increased left atrial size. Medications like dexmedetomidine and other alpha 2 agonists are best avoided. Ketamine is also best avoided. If needed, anticholinergics can be used in the face 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 reported blood pressure and thyroid are within normal limits. Recommend serial monitoring of these values as well. The findings may also represent individual variation and the elevated Pro BNP may be secondary to inflammation from the pulmonary status. Recommended ensuring the patient is heartworm negative on both antigen and antibody testing. A recheck echo is recommended in six months.





PATIENT

Pumas Shadow Estrada

SPECIES

Feline

BREED

DSH

SEX

Spayed Female

AGE

7 Years

WEIGHT

9.14 pounds

INTERPRETED BY

Sara Brethel DVM,
DACVIM (Cardiology)

IMAGING PERFORMED BY

Dr. Andrea Nason

HOSPITAL NAME

Caravan Vet

REFERRING VET

Dr. Andrea Nason

INVOICE

15529

DATE

04/27/26



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.

Sara Brethel DVM, DACVIM (Cardiology)

info@SonoPath.com