



PATIENT

Luno KippyCash

PRESENTING CLINICAL SIGNS

Coughing, muffled heart sounds, pleural effusion on rads
 Current meds: Furosemide 12.5mg BID

SPECIES

Feline

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

BREED

Siamese

SEX

MN

AGE

9yr

WEIGHT

24.5lb

| FELINE CARDIAC PARAMETERS | BODY WEIGHT | 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 | 24.5lb | NM | 0.58 | 1.47 | 0.62 | 45 | 78 |
| 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 | -- | 1.3 | 1.1 | | 1.4 | 1.1 | NM |
| Sisson D et al. JVIM 1991; 5: 232, Jacobs et al. Am J Vet Res 1985; 46:1705 | | | | | | | |

Cardiac Presentation

The echocardiogram in this patient demonstrated normal left atrial size based on 2 separate LA measurements. The cranial and caudal mitral valve leaflets presented normal linear structure and kinetics. No overt MR present on Doppler. The left ventricle presented borderline increased septal and free wall dimension. The myocardium presented normal echogenicity without subjective evidence of significant fibrotic or ischemic disease. The contractility of the ventricular walls was adequate and in normal range for this patient evidenced by the fractional shortening measurement and subjective evaluation of the different regions and angles of the myocardium. The left ventricular outflow tract demonstrated normal laminar flow and subjective structural integrity. Normal measured LVOT velocity was present. The right atrium and auricle revealed normal size, structure and content. No evidence of masses was noted or chamber overload. Tricuspid valvular assessment demonstrated adequate linear morphology and kinetics. No overt TR present on Doppler. The right ventricle was of normal size (1/3 diameter of LV), chordae structure, myocardial echogenicity and thickness. Pulmonic tract assessment revealed normal valve structure, laminar flow, and diameter (approx.1:1 pa/ao ratio). Normal measured RVOT velocity was present. No pericardial effusion. Mild to moderate volume pleural effusion. No overt cardiac, pericardial or mediastinal tumors in the visible window. No obvious arrhythmia.

ULTRASONOGRAPHIC FINDINGS

Primary

INTERPRETED BY

R. McKenzie Daniel, DVM, DABVP (Canine and Feline)

IMAGING PERFORMED BY

Meghan Morse

HOSPITAL NAME

Fredon Animal Hospital

REFERRING VET

Dr Roche

INVOICE
23939

DATE
02/19/2026



PATIENT

Luno KippyCash

- Normal cardiac structure / function with borderline increased LV wall dimension- pseudohypertrophy vs possible mild HCM
- Mild to moderate volume pleural effusion

SPECIES

Feline

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

No evidence of cardiac issues such as left or right heart chamber enlargement, LV systolic dysfunction or overt arrhythmia as an obvious cardiogenic cause of the plural effusion indicating non-cardiogenic plural effusion. Assessment of T4 level and systemic BP for evidence of complicating factors given borderline increased LV wall dimension is recommended. No overt indication for cardiac medications.

BREED

Siamese

Correlation with plural effusion analysis cytology +/- C/S or FIP titer / PCR in search of further clarification or possible definitive diagnosis is recommended.

SEX

MN

AGE

9yr

WEIGHT

24.5lb

INTERPRETED BY

R. McKenzie Daniel,
 DVM, DABVP
 (Canine and Feline)

IMAGING PERFORMED BY

Meghan Morse

HOSPITAL NAME

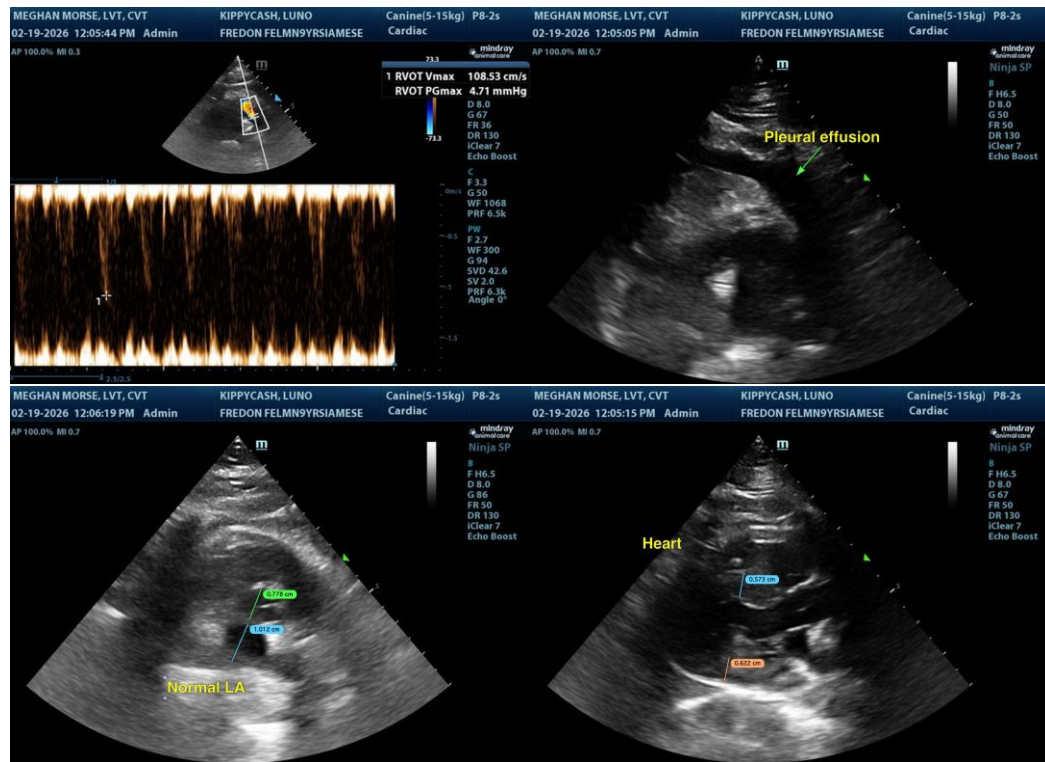
Fredon Animal Hospital

REFERRING VET

Dr Roche

INVOICE
 23939

DATE
 02/19/2026



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

Luno KippyCash

R. McKenzie Daniel, DVM, DABVP (Canine/Feline Practice)
info@sonopath.com

SPECIES

Feline

BREED

Siamese

SEX

MN

AGE

9yr

WEIGHT

24.5lb

INTERPRETED BY

R. McKenzie Daniel,
DVM, DABVP
(Canine and Feline)

**IMAGING
PERFORMED BY**

Meghan Morse

HOSPITAL NAME

Fredon Animal
Hospital

REFERRING VET

Dr Roche

**INVOICE
23939**

DATE
02/19/2026