



PATIENT

Lily Matthews

SPECIES

Feline

BREED

DLH

SEX

Spayed Female

AGE

11 Years 6 Months

WEIGHT

19 pounds

INTERPRETED BY

R. McKenzie Daniel,
DVM, DABVP (Canine
/ Feline Practice)

IMAGING PERFORMED BY

Shari Reffi CVT

HOSPITAL NAME

William Penn
Veterinary Hospital

REFERRING VET

Dr. Bouzaout

INVOICE

14457

DATE

03/19/26

PRESENTING CLINICAL SIGNS

- Fluid in chest, harsh lung sounds, pneumonia
- enlarged heart, obesity
- Diabetic
- (Rads attached)
- Current meds: Vetsulin 6U bid

Abnormal PE/Chem/CBC/UA Results: Fructosemine-397 (rr 191-349)

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

FELINE CARDIAC PARAMETERS	BODY WEIGHT (lbs)	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	19.0	202	0.48	1.45	0.51	40	74
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	--	1.36	1.5	1.0	0.82	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							

Cardiac Presentation

The echocardiogram in this patient demonstrated normal **left atrial** size and structure. The cranial and caudal **mitral** valve leaflets presented minor irregular age-related changes that are not clinically significant at this time with adequate extension in systole and union in diastole. No obvious significant MR on doppler. The **left ventricle** presented normal free wall and septal thicknesses with linear contour. The **myocardium** presented some echogenic remodeling consistent with expected age-related change. **Contractility** of the ventricular walls was adequate and in normal range for this breed and patient size. The **left ventricular outflow** tract demonstrated normal laminar flow with subjectively unremarkable structure. Normal measured LVOT velocity. Subjective assessment of the **right atrium** and auricle revealed normal size, structure and content. No evidence of masses was noted. **Tricuspid** valvular assessment demonstrated expected findings for this age patient. The **right ventricle** was of normal size (1/3 diameter of LV), echogenicity and thickness. **Pulmonic** tract assessment revealed normal valve structure, laminar flow, and diameter (approx.1:1 pa/ao ratio). Normal measured RVOT velocity. No visible **pericardial** or free pleural fluid was noted. The **mediastinum** was free of masses in the visible window. Subjective increased pericardial fat with no evidence of arrhythmia.

ULTRASONOGRAPHIC FINDINGS



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- Normal cardiac structure/function with myocardial remodeling and subjective increased pericardial fat.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

No evidence of clinical issues such as left or right heart chamber enlargement, LV systolic dysfunction, HCM criteria or other structural cardiomyopathy, arrhythmia or overt pericardial pathology in the visible window. Primary lower airway or non-cardiogenic pulmonary disease is probable.

No indication for cardiac medication with respiratory support indicated. Current cardiac anesthetic risk is considered mild. If required, the following protocol is suggested. Suggested anesthetic protocol may include opioid or Benzodiazepine pre-med, induction with Propofol or Alfaxalone, and appropriate gas anesthesia with avoidance of alpha 2 agonists.



