



## PATIENT

Nia McCune

## SPECIES

Feline

## BREED

DSH

## SEX

Female Spayed

## AGE

15 years

## WEIGHT

5lbs

## INTERPRETED BY

Maggie Machen Lamy,  
DVM, DACVIM  
(Cardiology)

## IMAGING PERFORMED BY

Emily Kalenius, DVM

## HOSPITAL NAME

Willamette Veterinary  
Hospital

## REFERRING VET

Dr. Jimmerson

## INVOICE

22041

## DATE

11/15/21

## PRESENTING CLINICAL SIGNS

History: CKD / pyelonephritis; hospitalized for 48 hours of IV fluid diuresis. Heart murmur developed while on fluids.

-Abnormal PE/Chem/CBC/UA Results: Most recent EPOC CREA 3.44 mg/dl BUN 109. PCV 28% Urine culture E coli. PE QAR MM pale pink and moist, CRT <2 sec. Grade 2-3/6 parasternal systolic murmur, eupneic with normal BV sounds. Abdominal palpation soft and non-painful. Eating k/d stew overnight. Thin BCS. Intermittent full body tremors

## ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. The left ventricular wall is normal in dimension. There is a diffusely hyperechoic endocardium consistent with age-related fibrosis. Minimal remodeling. The papillary muscles are hyperechoic. The left atrium is normal in size. The right atrium is normal in size. The right ventricle appears normal. The mitral valve is normal in structure and mobility. No MR. The tricuspid valve appears normal in structure and mobility. No TR. Blood flow through both the LVOT and RVOT are normal in velocity. No effusions. No obvious cardiac tumors.

## CARDIAC CHART

FELINE CARDIAC PARAMETERS	BODY WEIGHT (kg)	HR (BPM)	IVSd (cm) <small>(Moise, Pipers)</small>	LVIDd (cm) <small>(Moise, Pipers)</small>	LVWd (cm) <small>(Moise, Pipers)</small>	FS (%)	EF (%)
NORMAL PARAMETER	-----	150-240	0.35-0.55	<2 (mean 1.5)	3.5-0.55	35-67	80-100
PATIENT	2.3	208	0.49	1.0	0.46	68	96
FELINE CARDIAC PARAMETERS	LA/AO <small>(Boon)</small>	LA/AO HEART BASE (Swe) <small>(Abbott)</small>	LA 2D short axis Base view (cm) <small>(Abbott)</small>		LVOT VEL  (m/s)	RVOT VEL  (m/s)	E max  (m/s)
NORMAL	<1.5	<1.3	<1.2		<1.6	<1.3	<0.9
PATIENT	1.5	1.1	1.0		0.9	1.6	NM
<p><i>*Note: All measurements based upon multi-modal images and methods. An average value is reported.</i> Adapted from June Boon, Veterinary Echocardiography, 1998 Abbott J &amp; MacLean H JVIM 2006;20: 111-119, Moise et al. Am J Vet Res 47:1476, 1986. Pipers et al. Am J Vet Res 40:882, 1979.</p>							

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Overtly normal geriatric cardiac structure and function. Mild fibrosis of the left ventricular wall is noted, which is likely a normal age-related variant. No significant valve leaks are noted, and flow through the great vessels is normal in velocity. No definitive cause is identified for the murmur in this study, making it likely physiologic in origin (i.e., secondary to tachycardia, **volume changes**, etc.). Given these findings and a normal LA dimension, no medications are indicated.

No cardiac contraindication for general anesthesia. Should steroid therapy be indicated in the future, any cat should be monitored for intolerance (changes in RR/RE). Finally, while the LA is normal there remains risk for development of fluid overload in this case even without significant pathology seen here. Monitor RR/RE closely particularly in hospital, with CXR indicated if any changes develop.



**PATIENT**

Nia McCune

Monitor at home for signs of cardiac compromise, including respiratory changes and/or signs of a blood clot event (paralysis, neurologic changes).

**SPECIES**

Feline

Recommend recheck echocardiogram in 1 year to assess for any progressive issues or development of disease the pre-existing murmur may mask.

**BREED**

DSH

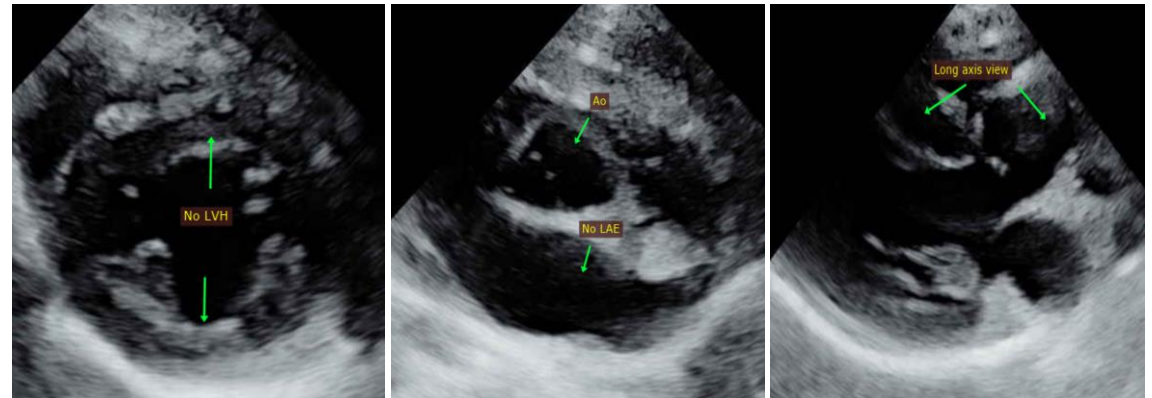
**SEX**

Female Spayed

**AGE**

15 years

**IMAGES**



**WEIGHT**

5lbs

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

**INTERPRETED BY**

Maggie Machen Lamy, DVM, DACVIM (Cardiology)

Thank you for this referral. This report was generated using transcription software, and minor dictation errors may be present. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance, please contact me.

**Maggie Machen Lamy, DVM**  
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info@sonopath.com

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