

**PATIENT**

Squishy Cox

**SPECIES**

Rabbit

**BREED**

Holland Lop

**SEX**

Male Intact

**AGE**

8 years

**WEIGHT**

2.5lbs

**INTERPRETED BY**

Maggie Machen  
Lamy, DVM, DACVIM  
(Cardiology)

**IMAGING  
PERFORMED BY**

Jenna Walsh, CVT

**HOSPITAL NAME**

West Hills Animal  
Hospital

**REFERRING VET**

Dr. Vickstrom

**INVOICE**

23249

**DATE**

5/17/22

**PRESENTING CLINICAL SIGNS**

History: History of increased abdominal gas and decreased appetite. Weight loss is persistent. There may in the past have been a positive response to Metronidazole, however not this time around. In the last few weeks, Squishy's appetite has decreased, and he has lost weight. He is currently being maintained on Critical Care for Herbivore and sc LRS, and Metronidazole PO. On exam, Squishy is thin generally. There is evidence of ocular discharge at medial canthus bilaterally, OS>OD. Incisors are within normal limits. Thoracic auscultation is unremarkable. Abdominal palpation: soft, nonpainful. lab work Normal Radiographic Findings 8 images are evaluated and are compared to the previous studies. The stomach is overly filled with granular soft tissue opacity contents. It is normal in position. The small intestines are incompletely visualized because of over distention of the cecum with gas and soft tissue opacity contents. The distal colon is moderately gas distended. The liver and spleen are incompletely visualized but not enlarged. The cardiac silhouette is at the upper limit of normal size. Extracardiac signs of failure are not seen. Lung markings are similar to the previous exams, there is no sign of progressive consolidation or atelectasis. The kidneys are incompletely visualized. The urinary bladder is partially distended. Minimal irregularity the cheek teeth occlusal plane is present. There is no sign of periodontal osteomyelitis. Degenerative joint disease is present in both shoulders The changes are most severe in the right shoulder and a psuedoarthrosis may be present. Changes are mildly progressive as compared to the previous studies. The TL spine is unremarkable. Conclusion Generalized ileus is suspected, focal obstruction is not seen but gastric or cecal foreign material is not seen. Colonic changes were more severe on the previous exam, but colonic disease is suspected. Liver disease cannot be excluded, if liver enzymes are elevated recommend ultrasound. Shoulder changes could be a source of discomfort. Definitive evidence of heart disease is not seen, if cardiac disease is suspected rec. an echocardiogram. Sam Silverman, DVM, PhD, DACVR 05/5/2022 8:56:40pm Primary Question/Differential to Be Answered in This Exam R/O at this time are cardiac disease, long-standing enteritis, liver or renal conditions.

**ELECTROCARDIOGRAPHIC FINDINGS** \*Note: Single lead ECGs are evaluated as a rhythm strip. Morphology/MEA cannot be definitively commented on.

A six lead ECG is available at 25mm/s, 40mm/mV. The average heart rate is 214bpm with a regular rhythm. The rhythm is sinus in origin, with a p for every QRS complex and vice versa. The P wave morphology is positive with a normal dimension. Normal PR. The QRS morphology is positive with normal dimension. MEA is normal. No ectopic beats, pauses or dysrhythmias observed.

ECG diagnosis: Normal sinus rhythm.

**ECHOCARDIOGRAM FINDINGS**

2D, m-mode, color flow and doppler imaging is available. The left ventricular wall is normal in dimension. There is a mildly hyperechoic endocardium consistent with fibrosis. The papillary muscles are hyperechoic and remodeled. The left atrium is normal in size. The right atrium is normal in size. The right ventricle appears normal. The mitral valve appears mildly thickened with trace MR is visualized. 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.



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**CARDIAC CHART**

CARDIAC PARAMETERS	BODY WEIGHT (kg)	HR (BPM)	IVSd (cm) (Moise, Pipers)	LVIDd (cm) (Moise, Pipers)	LVWd (cm) (Moise, Pipers)	FS (%)	EF (%)
NORMAL PARAMETER	-----	150-240	0.35-0.55	<2 (mean 1.5)	3.5-0.55	35-67	80-100
PATIENT	1.12	260	0.32	0.95	0.30	47	82
FELINE CARDIAC PARAMETERS	LA/AO (Boon)	LA/AO HEART BASE (Swe) (Abbott)	LA 2D short axis Base view (cm) (Abbott)		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	1.3	1.3	0.9		0.82	0.71	NM

*\*Note: All measurements based upon multi-modal images and methods. An average value is reported.*  
 Adapted from June Boon, Veterinary Echocardiography, 1998  
 Abbott J & 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.

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Overtly normal cardiac structure and function. Mild fibrosis of the left ventricular wall is noted, which is likely a normal variant. Trace MR with mild valve thickening may reflect early valve disease; however, this appears well compensated for at this time. No significant valve leaks are noted, and flow through the great vessels is normal in velocity. Finally, the ECG shows a normal sinus rhythm with no dysrhythmias identified.

Given these findings and a normal LA dimension, no medications are indicated.

No cardiac contraindication for general anesthesia. Should fluid or steroid therapy be indicated in the future, any cat should be monitored for intolerance (changes in RR/RE).

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

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

**IMAGES**





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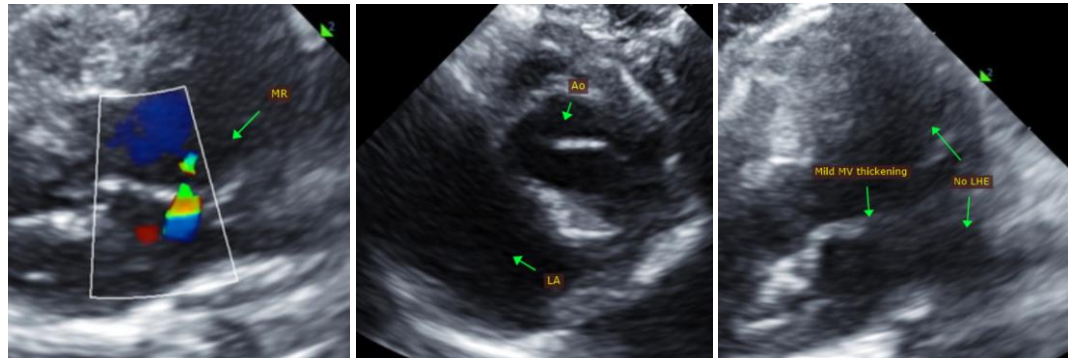
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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