



PATIENT

Ginger Dobbins

SPECIES

Canine

BREED

Mix

SEX

Female Spayed

PRESENTING CLINICAL SIGNS

History: 3-week duration of cough, no change on Doxycycline. No murmur heard. BP: 120-123mmhg. -Chest radiographs: Mild cardiomegaly +/- chronic bronchitis.

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. Uniform echogenicity mass associated with the heart base; 4.5 x 3.2cm in best-viewed cross section. The mass is well encapsulated and overlying the left atrium. No obstruction to blood flow or imposition on cardiac chambers is seen at this time. Mild eccentric mitral regurgitation, thickened mitral valve with no prolapse. MR velocity is normal. Left atrium is minimally dilated. LV is normal in dimension with borderline dysfunction. Mildly thickened TV with mild TR. Normal TR velocity. Normal right heart chamber dimensions. The pulmonic and aortic valves are normal in appearance. Normal LVOT and RVOT velocity. No AI or PI identified. No pericardial or pleural effusion.

CARDIAC CHART

AGE

12 years

WEIGHT

36.4lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

IMAGING PERFORMED BY

Kelly Vazquez, CVT

HOSPITAL NAME

Ho Ho Kus Veterinary
Hospital

REFERRING VET

Dr. Gannon

INVOICE

27019

DATE

10/20/22

CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO (Boon method)	LA/AO (Heart Base; Swe)	FS (%)	EF (%)	EPSS (cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	<1.6	28-40	40-100	<0.6
PATIENT	5.5	2.2	1.2	1.4	27	50	NM
CANINE CARDIAC PARAMETERS	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT (kg)	LA 2D short axis Base view (cm)	LVIDd Avg; 2D and m-mode short axis (cm)	LVIDs Avg; 2D and m-mode short axis (cm)
NORMAL PARAMETER	50-100	0.7-1.7	0.7-1.6	BELOW	BELOW	BELOW	BELOW
PATIENT	110	1.1	0.8	16.5	2.8	4.0	2.9
*Normal chamber parameters expressed as a mean value (SD)							
BODY WEIGHT DEPENDENT PARAMETERS							
<i>*Note: All measurements based upon multi-modal images and methods. An average value is reported.</i>							
Adapted from June Boon, Veterinary Echocardiography, 1998							
Rishniw M and Hollis NE, J Vet Intern Med 2000; 14:429-435							
Hansson et al, Vet Rad and Ultrasound 2002							
Bonagura et al. Echocardiography: principles of interpretation, Vet Clin North Am 15:1177, 1995							
	3	1.27 (5.3)	2.46 (2.46)	1.36 (5.5)			
	5	1.40 (4.5)	2.74 (5.2)	1.60 (4.7)			
	10	1.50 (3.8)	3.27 (3.5)	2.06 (3.1)			
	15	1.83 (2.0)	3.71 (2.4)	2.43 (2.1)			
	20	2.02 (1.9)	4.14 (2.2)	2.80 (2.0)			
	25	2.18 (2.4)	4.48 (2.9)	3.10 (2.5)			
	30	2.33 (3.3)	4.83 (3.9)	3.39 (3.4)			
	35	2.48 (4.3)	5.17 (5.0)	3.69 (4.5)			
	40	2.62 (5.2)	5.48 (6.1)	3.96 (5.4)			
	50	2.88 (7.1)	6.07 (8.3)	4.46 (7.4)			

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Chronic degenerative valve disease is identified with mild mitral and tricuspid regurgitation. Minimal left atrial enlargement indicates the current risk for complication is low. No significant right heart enlargement or pulmonary hypertension are appreciated. Finally, it is worth noting the LV function is borderline and should be monitored going forward. Avoid possible contributing issues, such as a nontraditional diet.

Of potentially greater concern, there is cardiac neoplasia identified associated with the heart base. The most likely tumor type given this location is a chemodectoma; however, other more malignant differentials cannot be ruled out. Chemodectomas are often incidental findings as is suspected to be the case here, only causing clinical signs if blood flow is obstructed, pericardial



PATIENT

Ginger Dobbins

effusion occurs, or a metastatic lesion causing systemic issues. It is difficult to definitively evaluate the mass peripherally (i.e., cannot rule out peripheral obstruction of flow through distal PA's) and a CT may be helpful to screen for true extent.

SPECIES

Canine

The prognosis with cardiac chemodectomas is fair. The limiting factor is often hemorrhage into the pericardium, impingement of cardiac blood flow secondary to tumor growth, or metastasis to the thorax or abdomen. Chemotherapy and/or radiation therapy can also be discussed with an Oncologist. Additionally systemic screening for metastatic lesions is recommended (AUS).

BREED

Mix

Given these findings, the presence of the tumor may certainly be contributing to the cough; however, chronic bronchitis is also mentioned in the history. The tumor is relatively large for this body size and may be creating a space occupying issue. Should the tumor continue to increase in dimension this can lead to congestion, worsening respiratory signs and/or right-sided congestion. This often presents as increasing pulmonary pressures and syncope with exertion. Monitoring is advised.

SEX

Female Spayed

AGE

12 years

No cardiac medications are indicated at this time. Consider Hydrocodone for quality of life. Monitor for development of a cough, labored breathing, exercise intolerance or collapse episodes.

WEIGHT

36.4lbs

Omega fatty acid supplementation and mild salt restriction may be of some long-term benefit. Monitor for development of a cough, labored breathing, exercise intolerance or collapse episodes.

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

Anesthetic risk is considered mild if needed. Cardiac protective drug choices (opioid/benzodiazepine premedication, propofol or alfaxalone induction, isoflurane gas) are recommended. Pre-oxygenate for 5-10 minutes prior to induction. Monitor for arrhythmias, hypotension, and hypoxia both intra and post-operatively and intervene as necessary. Mild IV fluid restriction is recommended to avoid fluid overload. Avoid heart rate stimulating drugs such as atropine unless clinically indicated.

IMAGING PERFORMED BY

Kelly Vazquez, CVT

PLAN

Further systemic screening is advised. Consider further evaluation of tumor extent through thoracic CT as discussed. Consider an Oncology consultation. Consider Hydrocodone if needed for quality of life.

HOSPITAL NAME

Ho Ho Kus Veterinary
Hospital

Recheck tumor size via echocardiography in 4-6 months, sooner if clinical signs arise.

REFERRING VET

Dr. Gannon

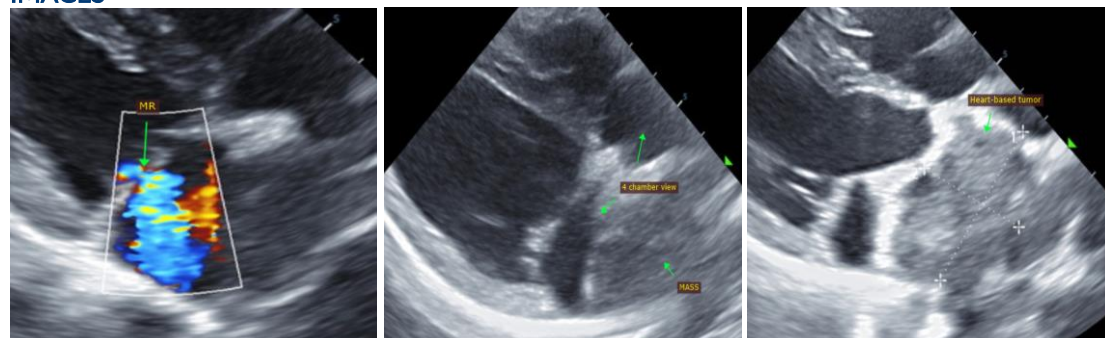
INVOICE

27019

DATE

10/20/22

IMAGES





PATIENT

Ginger Dobbins

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.

SPECIES

Canine

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.

BREED

Mix

Maggie Machen Lamy, DVM
Diplomate of the American College of Veterinary Internal Medicine (Cardiology)
info@sonopath.com

SEX

Female Spayed

AGE

12 years

WEIGHT

36.4lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

**IMAGING
PERFORMED BY**

Kelly Vazquez, CVT

HOSPITAL NAME

Ho Ho Kus Veterinary
Hospital

REFERRING VET

Dr. Gannon

INVOICE

27019

DATE

10/20/22