



PATIENT

Nala Malave

SPECIES

Canine

BREED

Mix

SEX

Female Spayed

AGE

8 years

WEIGHT

22.4lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

IMAGING PERFORMED BY

G. Ferrer, DVM

HOSPITAL NAME

Pulse: Pet Ultrasound
Services

REFERRING VET

Dr. Davila

INVOICE

46296

DATE

1/5/26

PRESENTING CLINICAL SIGNS

History: Presented for ascites and muffled cardiac sounds during auscultation. Lethargic and was recently hospitalized for pancreatitis. Still presented with watery diarrhea. History of neuroendocrine carcinoma with vascular invasion in August 2024. CBC/CHEM: WNL. 4DX: negative. Pericardiocentesis: 335mL removed from the pericardial sac; modified transudate. Abdominocentesis: 456mL were removed from the abdomen; modified transudate.

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. Massive soft tissue lesion is visualized (3.0 x 3.0cm) within the right atrial lumen traversing the TV. An origin is not visualized (rule out RA versus cava versus TV versus other). A tunnel of venous return can be seen essentially subverting the lesion, with flow obstructed otherwise. No obvious mitral regurgitation. The LV appears normal to decreased in dimension with adequate systolic function. The pulmonic and aortic valves are normal in appearance. Decreased LVOT and RVOT velocity.

CARDIAC CHART

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	NA	NA	NM	1.1	28	57	0.4
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	160	0.6	0.6	10.2	1.6	2.2	1.6
*Normal chamber parameters expressed as a mean value (SD)				3	1.27 (5.3)	2.46 (2.46)	1.36 (5.5)
BODY WEIGHT DEPENDENT PARAMETERS				5	1.40 (4.5)	2.74 (5.2)	1.60 (4.7)
*Note: All measurements based upon multi-modal images and methods. An average value is reported.				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)
Adapted from June Boon, Veterinary Echocardiography, 1998				25	2.18 (2.4)	4.48 (2.9)	3.10 (2.5)
Rishniw M and Hollis NE, J Vet Intern Med 2000; 14:429-435				30	2.33 (3.3)	4.83 (3.9)	3.39 (3.4)
Hansson et al, Vet Rad and Ultrasound 2002				35	2.48 (4.3)	5.17 (5.0)	3.69 (4.5)
Bonagura et al. Echocardiography: principles of interpretation, Vet Clin North Am 15:1177, 1995				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

Cardiac neoplasia is identified within the right atrium. The most likely origin is either the RA or the vena cava with infiltration into the RA. The mass is quite large and is causing an obstruction to flow returning to the right heart resulting in ascites and pericardial effusion consistent with right-sided CHF. Once a mass is obstructing normal flow, the patient is at extremely high risk for congestive signs as is seen in this case. The LV appears volume unloaded, as is typical with this pathology. No additional issues are seen.

A history of a thyroid neoplasia with vasculature inversion is certainly concerning; however, how the two lesions are related is open. Hemangiosarcoma would be the most likely tumor type with a right atrial origin; however, this is complicated by the patient's history.



PATIENT

Nala Malave

SPECIES

Canine

BREED

Mix

SEX

Female Spayed

AGE

8 years

WEIGHT

22.4lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

IMAGING PERFORMED BY

G. Ferrer, DVM

HOSPITAL NAME

Pulse: Pet Ultrasound
Services

REFERRING VET

Dr. Davila

INVOICE

46296

DATE

1/5/26

Going forward there may be some options for obtaining more information and palliating this type of cancer. Should the client elect to proceed, radiation and/or chemotherapy can be discussed with an Oncologist. Additionally, full systemic evaluation should be considered to screen for ancillary lesions that may be able to be sampled. Advanced imaging of the thorax may also shed light on a definitive diagnosis (thoracic CT). If further work up is declined, options would be to attempt medical therapy for congestion or elect euthanasia. The latter must be considered in this case given the significance of the findings.

High risk will always remain for recurrent effusions (pericardial, pleural or abdominal) and development of arrhythmias/sudden death at home. Monitor at home for progressive abdominal distention, labored breathing and/or lethargy and collapse. Significant activity restriction is advised.

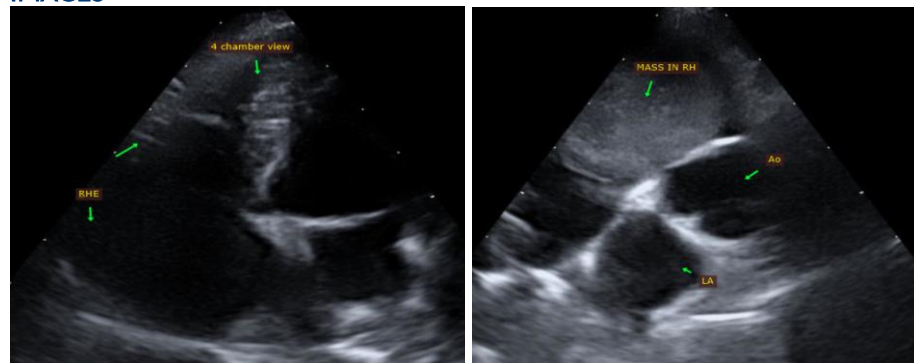
PLAN

Consider options as discussed; referral v medical management v euthanasia. Referral should be considered for advanced imaging if desired. If declined, administer Lasix 1-2mg/kg PO q12h. Administer spironolactone 1-2mg/kg PO q12h. Administer Pimobendan 0.3mg/kg PO q12h. Administer Hydrocodone if needed. Abdominocentesis should be performed as needed for patient comfort.

A renal panel and BP are recommended in 5-7 days, then every 2-3 months going forward. Euthanasia should be considered if quality of life suffers.

A recheck echocardiogram to reassess mass dimension and heart size is recommended in 2-3 months.

IMAGES



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
Diplomate of the American College of Veterinary Internal Medicine (Cardiology)
info@sonopath.com