



PATIENT

Champagne Lehman

SPECIES

Canine

BREED

Leonberger

SEX

Female Spayed

AGE

7years

WEIGHT

138lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

IMAGING PERFORMED BY

Kara Wallisch

HOSPITAL NAME

Sondel Family
Veterinary Clinic

REFERRING VET

Dr. Wallisch

INVOICE

22542

DATE

2/14/22

PRESENTING CLINICAL SIGNS

History: Presented today for lethargy/malaise Some soft stools and occasional vomiting. History of arthritis and lar par.

-Abnormal PE/Chem/CBC/UA Results: ALP 568, BUN 87, Phos 8.4, Cr 2.1. WBC 26k with neutrophilia 22.6 UA pending.

-Chest radiographs: VHS 11.6, R sided heart enlargement, significant spondylosis; evidence of pleural/abdominal effusion

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. Moderate volume pericardial effusion without obvious diastolic collapse of the right atrium. Hypochoic well-demarcated lesion associated with the right auricle/AV groove (see below). In some views it appears to be infiltrating the right atrium although this is not consistent. The LV function is adequate. Left atrium is normal in diameter. LV is normal in dimension and function. The pulmonic and aortic valves are normal in appearance. Normal outflow velocities. Scant abdominal effusion is seen on subcostal views. Intermittent tachycardia throughout.

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	1.2	28	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	NM	0.7	0.75	62.6	3.0	4.3	3.1
*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)
<i>*Note: All measurements based upon multi-modal images and methods. An average value is reported.</i>				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

The cause of the clinical signs is pericardial effusion secondary to cardiac neoplasia associated with the right heart. The most likely tumor type given this location is a hemangiosarcoma (HSA). Other tumor types are less likely, including chemodectoma or ectopic parathyroid tumor.

Regardless, there is accumulation of fluid in abdomen, which is secondary to compression from the effusion. Even without obvious collapse of the RA, this is likely consistent with early tamponade and emergency pericardiocentesis is indicated. Cytology of the effusion is



PATIENT

Champagne Lehman

recommended to help confirm a definitive diagnosis, although often of low yield. An intermittent tachycardia is noted throughout the study, which is highly suspicious for VT. A full baseline ECG is strongly recommended with close monitoring for syncope going forward.

SPECIES

Canine

The prognosis with cardiac hemangiosarcoma is poor, with an MST of only 2-3 months. The emergent limiting factor is often recurrent hemorrhage, and a pericardial window or subtotal pericardiectomy may relieve clinical signs. Chemotherapy and/or radiation can also be discussed with an Oncologist and may extend average survival time. HSA also has a high metastatic rate, and full systemic screening is recommended for metastatic lesions. Patients with cardiac neoplasia are at high risk for recurrent hemorrhage and development of tamponade, malignant arrhythmias/sudden death in the future.

BREED

Leonberger

SEX

Female Spayed

No cardiac medications are clearly indicated at this time. Over the counter herbal supplement Yunnan Baiyao may help decrease risk of bleeding, however true benefit is speculative (1 capsule PO BID).

AGE

7years

Once symptoms are relieved via pericardiocentesis and fluid resuscitation, a recheck of tumor dimension and fluid status can be considered in 1-2 months, sooner if recurrence of clinical signs.

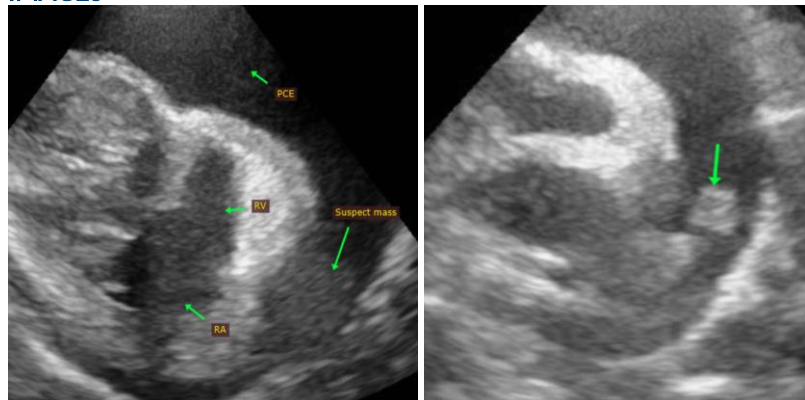
WEIGHT

138lbs

IMAGES

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

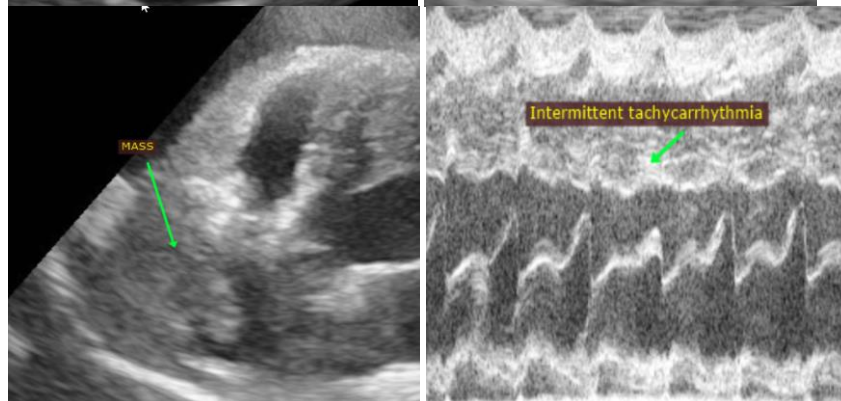


IMAGING PERFORMED BY

Kara Wallisch

HOSPITAL NAME

Sondel Family
Veterinary Clinic



REFERRING VET

Dr. Wallisch

INVOICE

22542

DATE

2/14/22

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.



PATIENT

Champagne Lehman

SPECIES

Canine

BREED

Leonberger

SEX

Female Spayed

AGE

7years

WEIGHT

138lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

**IMAGING
PERFORMED BY**

Kara Wallisch

HOSPITAL NAME

Sondel Family
Veterinary Clinic

REFERRING VET

Dr. Wallisch

INVOICE

22542

DATE

2/14/22

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