



PATIENT

Sofie Karnes

SPECIES

Feline

BREED

DSH

SEX

Female Spayed

AGE

13 years

WEIGHT

8.02lbs

INTERPRETED BY

Maggie Machen Lamy, DVM, DACVIM (Cardiology)

HOSPITAL NAME

Everhart Wellpet Center

REFERRING VET

Dr. Betta

INVOICE

21174

DATE

9/23/21

PRESENTING CLINICAL SIGNS

History: Has been seen for hyperthyroidism since April 2020. Recent exam showed NEW grade 3/6 heart murmur and about 1.5# weight loss. Dental disease present. Elevated liver values on lab work. -Pertinent abnormal PE/Chem/CBC/UA Results: Alt: 292, alp: 298 (previously normal as of April 2020) t4: 4.2 - however, increased dose of Methimazole and owner reports some hair loss. -Current medications: Methimazole 7.5mg AM and 5mg PM -Sedation used: -STAT: Not requested

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. The left ventricular wall is largely normal with a focal septal thickening. The remainder of the LV wall measures normal. There is a diffusely hyperechoic endocardium consistent with fibrosis. The papillary muscles are mildly remodeled and hyperechoic. The endocardium also appears remodeled. 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. Mild to moderate TR. Normal velocity. Blood flow through both the LVOT and RVOT is normal in velocity. No pleural or pericardial effusion seen. No obvious cardiac tumors.

CARDIAC CHART

FELINE 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	3.5-0.55	<2 (mean 1.5)	3.5-0.55	35-67	80-100
PATIENT	3.6	160	0.4	1.3	0.4	57	90
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	NM	1.1	0.9	1.4	0.9	NM	

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

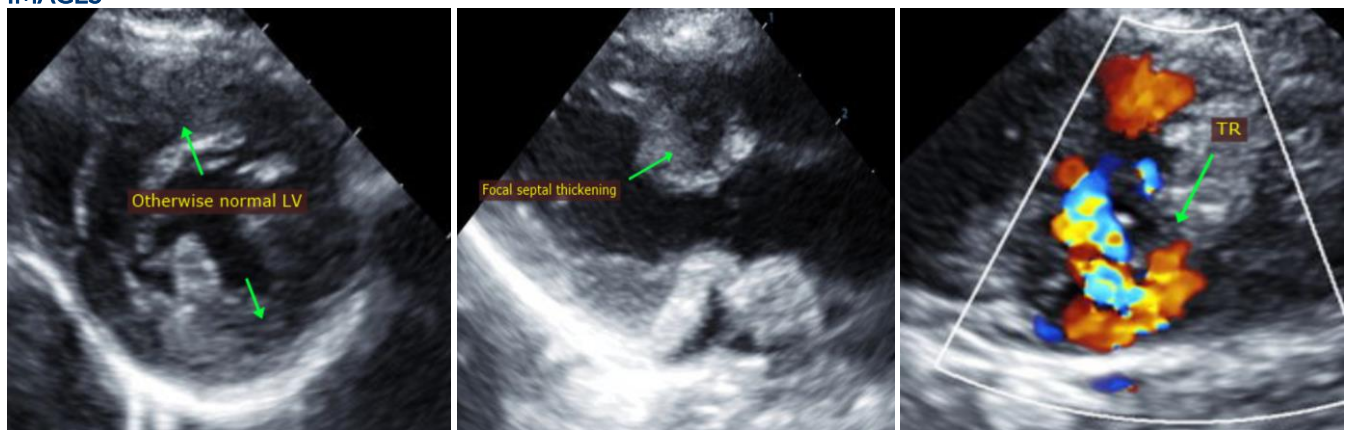
Mild focal LV hypertrophy is present in addition to significant LV remodeling, which may be indicative of early hypertrophic disease or may simply represent a normal variant. In a chronically hyperthyroid cat this may be related, depending on thyroid status. Hypertension should be ruled out as contributing factors. Regardless, the LA is normal which would indicate clinical stability. Mild to moderate TR is the only cause of the murmur appreciated which in light of a normal right atrium, appears hemodynamically insignificant. Serial echocardiography will be necessary to determine progression and clinical significance of both findings.

With a normal LA dimension, no medications are indicated.

Anesthetic risk is considered mild, however judicious IV fluid rates are advised to avoid fluid overload. Additionally, drugs that stimulate heart rate should be avoided unless clinically necessary (glycopyrrolate, atropine). Avoid vasodilators as this may worsen the obstruction. A reasonable protocol includes opioid/benzodiazepine premedication, propofol induction, isoflurane maintenance. Additionally, steroids should be used with caution on older cats, as even a 'normal' geriatric heart can develop evidence of intolerance and fluid retention. Monitor for any development of clinical signs, including labored breathing or signs of a blood clot (paralysis, neurologic change).

Recheck echocardiogram is recommended in 6-12 months, sooner if clinical signs arise.

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.

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