



PATIENT

Havoc Griger

SPECIES

Feline

BREED

DSH

SEX

M/N

AGE

11 yr

WEIGHT

9.7

INTERPRETED BY

R. McKenzie Daniel,
DVM, DABVP
(Canine and Feline)

IMAGING PERFORMED BY

JK

HOSPITAL NAME

Hamburg VC

REFERRING VET

Dr. Branning

INVOICE

10554

DATE

1/15/26

PRESENTING CLINICAL SIGNS

Grade 2/6 murmur

Abnormal PE/Chem/CBC/UA Results: BP 120, 124 Doppler

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

FELINE CARDIAC PARAMETERS	BODY WEIGHT	HR (BPM)	IVSd (cm)	LVIDd (cm)	LVWd (cm)	FS (%)	EF (%)
NORMAL PARAMETER	-----	150-240	0.3-0.6	1.0-2.1	0.25-0.6	35-67	80-100
PATIENT	9.7	168	0.43	1.45	0.43	55	88
FELINE CARDIAC PARAMETERS	LA/AO (M-mode)	LA/AO HEART BASE (Sisson)	LAD LA MAX 4 Chamber		LVOT VEL. (m/s)	RVOT VEL. (m/s)	IVRT (m)
NORMAL PARAMETER	<1.5	1.6	0.7-1.7		<1.6	<1.3	40-60
PATIENT	1.2	1.3	1.3		1.0	0.85	-

Adapted from June Boon, Veterinary Echocardiography, 1998

Sisson D et al. JVIM 1991; 5: 232, Jacobs et al. Am J Vet Res 1985; 46:1705

Cardiac Presentation

The echocardiogram in this patient demonstrated normal **left atrial** size and structure. Chamber volume and blood echogenicity were normal. The cranial and caudal **mitral** valve leaflets presented minor irregular age-related changes that are not clinically significant at this time with adequate extension in systole and union in diastole. No obvious significant MR on Doppler. The **left ventricle** presented normal free wall and septal thicknesses with linear contour. The **myocardium** presented some echogenic remodeling consistent with expected age-related change. **Contractility** of the ventricular walls was adequate and in normal range for this breed and patient size. The **left ventricular outflow** tract demonstrated normal laminar flow with subjectively unremarkable structure. Normal measured LVOT velocity was noted. Subjective assessment of the **right atrium** and auricle revealed normal size, structure and content. No evidence of masses was noted. **Tricuspid** valvular assessment demonstrated expected findings for this age patient. No overt significant TR on Doppler. The **right ventricle** was of normal size (1/3 diameter of LV), echogenicity and thickness. **Pulmonic** tract assessment revealed normal valve structure, laminar flow, and diameter (approx. 1:1 pa/ao ratio). Normal measured RVOT velocity was noted. No visible **pericardial** or free pleural fluid was noted. The **mediastinum** was free of masses in the visible window.

ULTRASONOGRAPHIC FINDINGS

- Normal cardiac structure / function with mild LV remodeling



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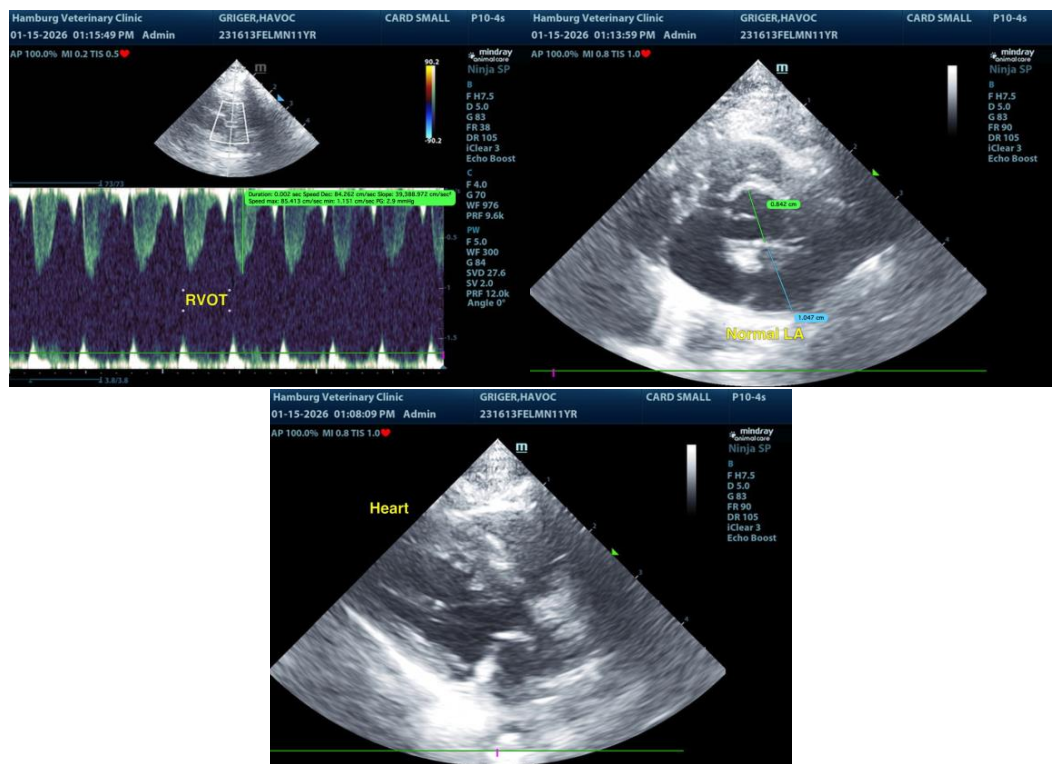
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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There is no evidence of clinical issues such as left or right heart chamber enlargement, LV systolic dysfunction, overt significant valvular insufficiencies, or arrhythmia. A benign flow murmur is probable, although a small non-visualized flow abnormality cannot be excluded. Regardless, the hemodynamic effects of the murmur are low. There is no indication for cardiac medications. Conservative monitoring of the murmur going forward is advised. Recheck echocardiogram is suggested in 6-12 months, sooner if clinical signs arise or if an increase in murmur intensity. There are no anesthetic contraindications if anesthesia is required. Suggested anesthetic protocol may include opioid or Benzodiazepine pre-med, induction with Propofol or Alfaxalone, and appropriate gas anesthesia with avoidance of alpha 2 agonists.



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

Thank you for this referral. 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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