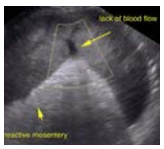
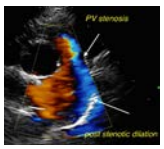
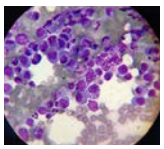
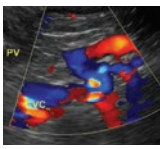
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT

Sandy Mona

SPECIES

Feline

BREED

Persian

SEX

Female

AGE

14 Years

WEIGHT

2.3

INTERPRETED BY

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

IMAGING PERFORMED BY

Dr. Inam ul Haq

HOSPITAL NAME

City Vet Clinic

REFERRING VET

Dr. Inam ul Haq

INVOICE

44629

DATE

8/14/23

PRESENTING CLINICAL SIGNS

She is not eating well for a while. Mild hypercalcemia was noticed on blood biochemistry. Loud HM was heard by the RDVM.

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

FELINE CARDIAC PARAMETERS	BODY WEIGHT (kg)	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		NM	0.63	1.55	0.65	41	76

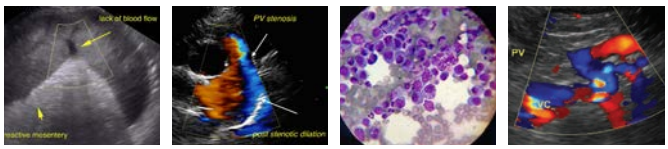
FELINE CARDIAC PARAMETERS	LA/AO (Boon)	LA/AO HEART BASE (Sisson)	LA 2D 4-chamber long axis AS to FW (Sisson) (cm)	LVOT VEL. (m/s)	RVOT VEL. (m/s)	IVRT (m/)
NORMAL PARAMETER	<1.5	0.88-1.79	0.7-1.7	<1.6	<1.3	40-60
PATIENT	--	1.2	1.3	1.8	1.0	NM

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 with no evidence of "smoke" or thrombus. The cranial and caudal **mitral** valve leaflets presented mildly thickened with some insufficiency noted on Doppler. The **left ventricle** presented excessive free wall and septal thicknesses with hypertrophic thicknesses compared to normal for this species. The **myocardium** presented essentially normal echogenicity without immediate signs of fibrotic or ischemic disease. **Contractility** of the ventricular walls was considered excessive for this patient evidenced by the elevated fractional shortening measurement. The **aorta** was dilated into two subjective chambers, one consisting of aortic root containing systolic blood flow on doppler. The other area of the aorta consisted of non-blood flow on color doppler and with non-organized swirling echogenic debris. This is consistent with aortic dissection. Suspect probable concurrent small ventricular septal defect at the level of the aortic valve. The aortic valve was irregularly thickened and hyperechoic in appearance. Concurrent aortic insufficiency present on doppler. Normal measured LVOT velocity. Subjective assessment of the **right atrium** and auricle revealed normal size, structure and content. Potential for emerging diastolic collapse of the right atrial free wall, which may suggest emerging or current cardiac tamponade. No overt evidence of right atrium/auricle masses. **Tricuspid** valvular assessment demonstrated linear morphology. The **right ventricle** was of normal size with normal chordae structure, myocardial echogenicity and thickness. **Pulmonic** tract assessment revealed normal valve structure, laminar flow, and diameter. Normal measured RVOT velocity. Mild to moderate volume pericardial effusion exhibiting mild echogenic component and probable pericardial blood clot. Potential for mild volume free pleural fluid possible. No overt evidence of pericardial or cranial mediastinal masses. Periodic arrhythmia present.

SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
SonoPath.com
1-800-838-4268 info@sonopath.com



PATIENT

Sandy Mona

SPECIES

Feline

BREED

Persian

SEX

Female

AGE

14 Years

WEIGHT

2.3

INTERPRETED BY

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

IMAGING PERFORMED BY

Dr. Inam ul Haq

HOSPITAL NAME

City Vet Clinic

REFERRING VET

Dr. Inam ul Haq

INVOICE

44629

DATE

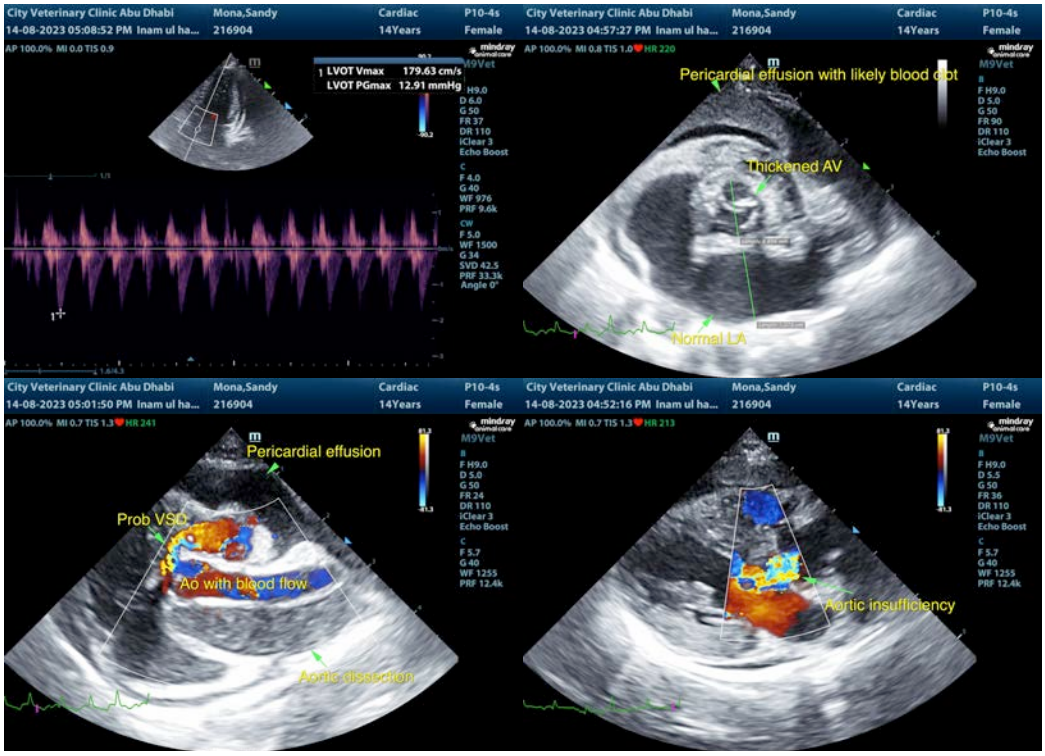
8/14/23

ULTRASONOGRAPHIC FINDINGS

- Aortic dissection, thickened aortic valve with aortic insufficiency
- Mild hypertrophic cardiomyopathy – rule out diagnosis once patient is deemed euthyroid and normotensive
- Suspect probable concurrent small ventricular septal defect
- Mild to moderate volume pericardial effusion and probable pericardial blood clot
- Intermittent arrhythmia

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Unfortunately, the finding of aortic dissection, which is a rare condition in cats and at time is a severe consequence to systemic hypertension or other underlying disease process, carries a poor prognosis with high possibility of sudden death. There is no treatment for this condition. ECG may be considered for further assessment of periodic arrhythmia. Poor prognosis is unfortunately indicated.



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.

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)

info@SonoPath.com